FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION NAPA-SOLANO RIDGE TRAIL PROJECT

Coastal Conservancy Project Number 04-018

PREPARED FOR:
Bay Area Ridge Trail Council
California State Coastal Conservancy

July 14, 2004

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Prepared By:

Michael Kent and Associates 5931 Golden Gate Avenue San Pablo, CA 94806-4126

in association with

LandPeople, Landscape Architects and Planners Anthropological Studies Center, Sonoma State University TOVA Applied Science and Technology

#	Mitigation	Implementation or Monitoring Responsibility
BIO	LOGICAL RESOURCES	
1	 IMPACTS ON SPECIAL STATUS PLANTS A. A pre-construction survey shall be conducted to identify the occurrence of special-status plants within the trail corridor. The survey shall be conducted at the appropriate months to correspond to the known flowering periods of such species (Table 1) or during the spring/early summer when diagnostic vegetative characteristics of special status plants are discernable. The survey shall be conducted using the methods and procedures adopted by the California Native Plant Society. No ground/vegetation disturbing activities shall commence on-site until such survey has been completed and it is determined that a special-status plant does not occur in the trail corridor. If the Napa false indigo, Contra Costa goldfields, Cobb Mountain lupine, green monardella, or Victors gooseberry are not found to occur within the trail corridor, trail construction would occur in upland areas before construction of the bridged creek crossings. The bridge crossings of Marie Creek would then be surveyed to determine the presence or absence of riparian or wetland species (i.e., few-flowered navarretia and marsh checkerbloom). If vegetation habitat or suitable substrate for these species is not present at the proposed bridge crossings, wooden stakes shall be installed to define the construction zone of allowable ground disturbance activities. The bridge crossing of Marie Creek would proceed with the implementation of this protective measure. B. If special status-species are found within the trail corridor, the trail shall be realigned to avoid impact to the 	BARTC
	plant population, if feasible. Prior to the implementation of the proposed project, a qualified botanist shall flag areas supporting the identified special-status species. This flagged area would designate those plant populations to be protected. The proposed trail construction may proceed if such identified plant populations can be avoided.	
	C. Where the loss of a population/stand of a special-status plant is unavoidable, a qualified botanist shall make a determination as to whether or not the proposed trail would jeopardize the plant's existence in the region. If it is determined that such would occur, compensatory mitigation shall be implemented as follows:	

¹ CNPS. 2001. Inventory of Rare and Endangered Plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA x +388pp.

#		Mitigation	Implementation or Monitoring Responsibility
	1.	Areas near the proposed trail alignment; either presently supporting or potentially supporting the identified special status plant populations, shall be established at a ratio of 2:1 (area established: area impacted). The location of the mitigation area, including the suitability of lands designated as "no land clearing" on the trail plan, shall be determined in cooperation with and subject to the approval of Napa County and, as appropriate, the CDFG.	
	2.	The information on the plant population, anticipated impact and proposed mitigation shall be provided to the Easement Monitoring Coordinator for the Land Trust of Napa County, which holds a conservation easement on the property	
	3.	The mitigation area shall be enhanced if the habitat already supports a population of the target special status species, or shall be restored if the target species is not present but the habitat is suitable to support such species. In either case, the following measures shall be implemented:	
		a. Seeds of the target special status species shall be collected from the project impact area during the appropriate developmental stage of the plants and broadcast in the mitigation area.	
		b. Some of the seeds shall be appropriately stored/germinated and grown for seed production in a nursery familiar with growing native plants.	
		c. A Rare Plant Mitigation and Monitoring Plan shall be developed to provide for the long-term protection of the target special status species population established in the mitigation area. The Easement Monitoring Coordinator for the Land Trust of Napa County shall approve this Plan after consultation with the CDFG and the local chapter of the CNPS. The plan shall define procedures and provide guaranteed funding for seed collection, transplanting, and monitoring and achieving success criteria. The monitoring shall be continued annually for a minimum of 5 years or until a self-reproducing plant population has been established on the site for a minimum of 3 consecutive years without significant human assistance (i.e., replanting).	
		d. Contingency measures shall be implemented, as required, to satisfy the specific success criteria specified in the Plan.	

#	Mitigation	Implementation or Monitoring Responsibility
	 IMPACTS ON NESTING RAPTOR A. A qualified biologist shall conduct a pre-construction survey to determine if the nest is occupied. The survey shall occur within 14 days prior to the initiation of trail construction activities during the early part of the breeding season (January through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through September). An active nest would be indicated by one or more of the following: Incubation behavior of adults (e.g., regular periods of "disappearance" into the same location followed by short, secretive flights to forage) Extreme distress and alarm calls when in close vicinity of the nest tree Observation of food being carried on the beak or claws to the nest B. If the nest is active, the proposed trail alignment between Waypoints 21 and 27 shall be located at least 100 feet from the live oak tree containing the nest structure and the following measures shall be implemented to protect the nest site: Establishment of a buffer using flagging or staking around the tree in accordance with CDFG recommendations until the young have fledged. The nest tree shall be monitored a minimum of once per week to confirm that the young have fledged and that no new nesting pairs are present before the buffer is removed. If it is not feasible to delay or modify construction activities around the tree, the CDFG shall be contacted to discuss alternative buffer options. 	BARTC
3	IMPACTS ON WILDLIFE MOVEMENT All property-line fencing shall be limited to barbed wire or other similar fencing that does not restrict the movement of terrestrial wildlife.	BARTC

4 IMPACTS ON EXISTING TREES

- A. No activities that might cause damage to the root systems by earth-moving equipment shall be allowed.
- B. Temporary flagging or staking shall be placed around those trees that are near the trail but not proposed for limb removal. The temporary flagging or staking shall be installed at a distance equal to one-half of the canopy radius measured outward from the edge of the dripline. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated protective zone for the duration of the project.

Although the project as currently proposed is not anticipated to require tree removal, unexpected obstacles encountered during construction could necessitate removal of a small number of trees. If any tree(s) larger than 6 inches DBH are removed, the following mitigation measures shall apply.

- C. Compensatory tree replacement shall be provided for native oak or bay trees greater than 6 inches diameter that are proposed for removal:
 - 1. Replacement of native oak or bay trees shall be achieved by planting two fifteen-gallon trees for each tree removed (2:1 ratio).
 - 2. Replacement trees shall be planted between November and January with nursery stock from local sources. The trees shall be irrigated by hand for three years and protected from herbivores to ensure their survival. Seedling tree planting, watering, and seedling protection will be administered by the Easement Monitoring Coordinator for the Land Trust of Napa County.
 - 3. Annual monitoring of the planted trees shall be conducted for five years from the time of planting. Monitoring reports shall be submitted annually to the Easement Monitoring Coordinator for the Land Trust of Napa County.
 - 4. Contingency measures shall be implemented, if necessary, to achieve the specified success for oak or bay reestablishment during a five-year monitoring period. Any replanted trees shall be monitored for survivorship for at least five years from the time of replanting.

BARTC

CUI	CULTURAL RESOURCES						
5	IMPACTS ON SUBSURFACE HISTORIC RESOURCES If concentrations of prehistoric or other historic-period materials are encountered during ground-disturbing work, all work in the immediate vicinity shall be halted until the services of a qualified archaeologist can be retained to identify and evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). The project sponsor shall fund and implement the mitigation in accordance with Section 15064.5(c)–(f) of the CEQA Guidelines and Public Resources Code Section 21083.2. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, and dietary bone or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials might include stone, concrete, or adobe footings, corrals and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse.	BARTC					
6	IMPACTS ON PREHISTORIC BEDROCK MORTAR AND LITHIC SCATTER Use of the area near CA-NAP-853 shall be monitored by trail personnel to prevent disturbance of the site and to quickly identify disturbance and take immediate measures to protect the site should disturbance occur. These measures shall include further study to more accurately determine the boundaries and nature of these cultural resources and to evaluate them in accordance with the criteria of the California Environmental Quality Act Guidelines and the California Register of Historical Resources.	BARTC					
7	IMPACTS ON SUBSURFACE ARCHAEOLOGICAL RESOURCES Implement Mitigation Measure 5.	BARTC					
8	IMPACTS ON HUMAN REMAINS In the event that any human remains are encountered during site disturbance, all ground–disturbing work shall cease immediately and the County coroner shall be notified immediately. If the coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.	BARTC					

California Environmental Quality Act (CEQA) Environmental Checklist Form

1. Project title: Napa-Solano Ridge Trail Project

2. Lead Agency name and address:

California Coastal Conservancy 1330 Broadway, 11th Floor Oakland, California 94612-2530

3. Contact person and phone number:

Abe Doherty, Project Manager 510.286.4183

4. Project location:

Napa County Assessor's Parcel Number 045-370-001, located in eastern Napa County, California, east of the City of Napa, north of Highway 12, west of Vallejo Lakes, and south of Green Valley Road (Napa County segment).

5. Project sponsor's name and address:

Bay Area Ridge Trail Council 1007 General Kennedy Avenue, Suite 3 San Francisco, CA 94129

Contacts:

Holly Van Houten, Executive Director, Bay Area Ridge Trail Council 1007 General Kennedy Avenue, Suite 3 San Francisco, CA 94129 415.561.2595 ed@ridgetrail.org

Dee Swanhuyser, North Bay Trail Director, Bay Area Ridge Trail Council 1800 Jonive Sebastopol, CA 95472 707.823.3236 ridgetrail@prodigy.net

6. General Plan designation:

Agriculture, Watershed & Open Space

7. Zoning:

AW, Agricultural Watershed

8. Description of project:

Introduction

As part of its goal to create an over 500-mile Bay Area Ridge Trail, the Bay Area Ridge Trail Council (BARTC) is proposing to build a multi-use trail to extend the current portion of the Bay Area Ridge Trail within Napa County's Skyline Wilderness Park onto a parcel that is part of the adjacent Tuteur Family Trust property (see Figure 1: Napa-Solano Ridge Trail Regional Location Map, and Figure 2: Napa-Solano Ridge Trail Parcel Map). The proposed Napa-Solano Ridge Trail Project would be a key part of an east-west connection between Skyline Wilderness Park and the proposed future main Bay Area Ridge Trail route (see Figure 1: Napa-Solano Ridge Trail Regional Location Map). The proposed main Bay Area Ridge Trail alignment in this region passes from the Lynch Canyon Open Space Preserve in Solano County (south of Highway 12) and travels north along the ridgeline to the City of Vallejo's Vallejo Lakes watershed property.

The project site is owned by the Tuteur Family Trust (John and Mary Holman Tuteur, Trustees), which would grant the easement for the proposed trail. The Tuteur Family Trust parcel is subject to a conservation easement held by The Land Trust of Napa County (The LTNC). This conservation easement allows the property owners (Tuteur Family Trust) to undertake certain activities and uses on the property, including public trails, if approved by The LTNC.

Funding for the proposed project is anticipated to be provided by Napa County and the California State Coastal Conservancy.

Project Location

The project site is located in the unincorporated area of Napa County east of the City of Napa, north of Highway 12, west of Vallejo Lakes and south of the Napa County segment of Green Valley Road (see Figure 1, Regional Location Map). The Napa/Solano County line is to the south, east and north of the property. The project site is adjacent to and east of Skyline Wilderness Park.

Project Site Description

The site for the proposed Napa-Solano Ridge Trail is approximately 106.75 acres and is designated as Napa County Assessor's Parcel Number 045-370-001 (see Figure 2, Parcel Map). To the northeast of the property is Vallejo Lakes watershed property owned by City of Vallejo. To the east and south are privately owned properties, and to the west and adjacent is Skyline Wilderness Park. To the north is additional Tuteur Family Trust property, and further northeast is the Green Valley Ranch.

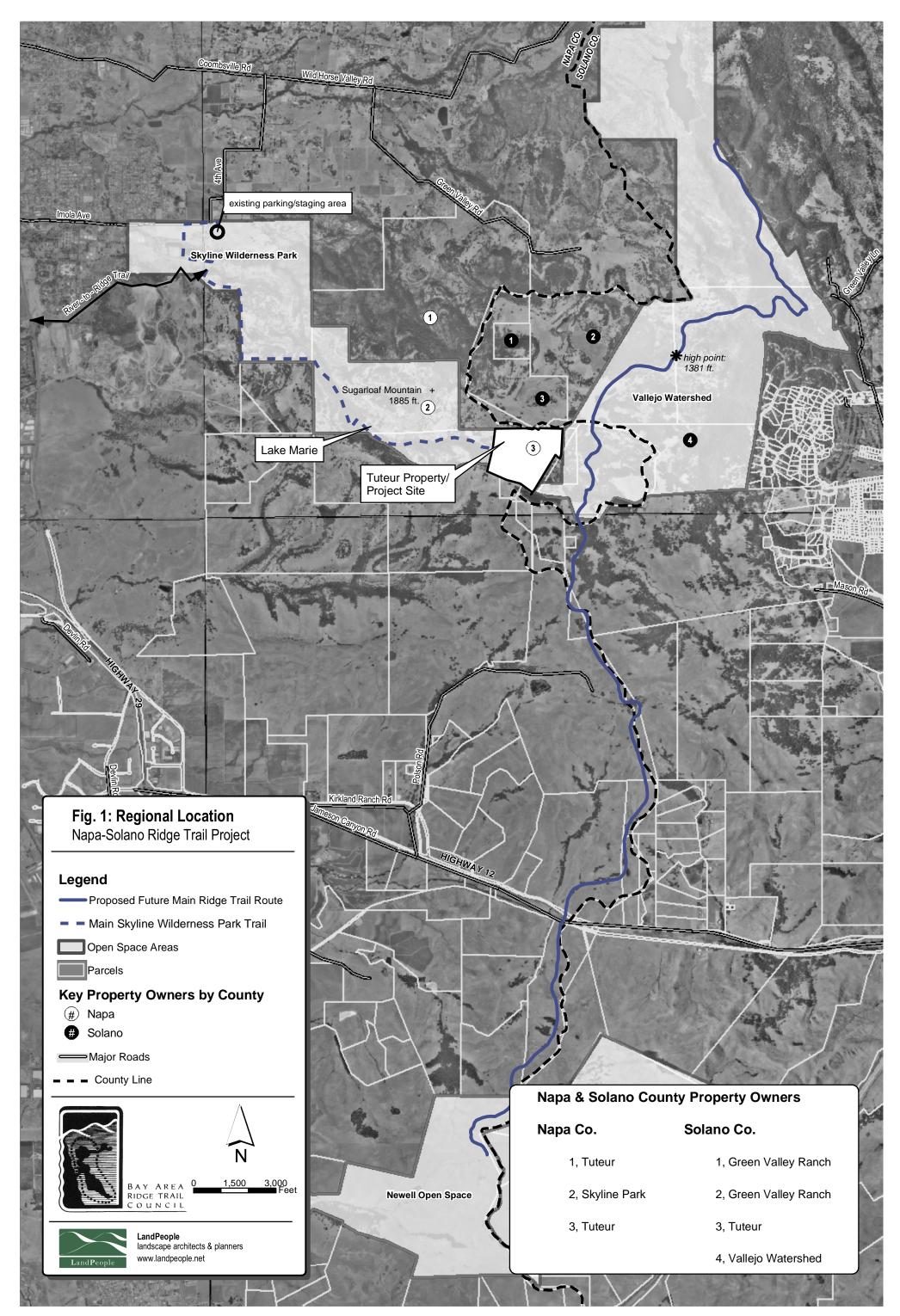


Figure 1: Napa-Solano Ridge Trail Regional Location Map

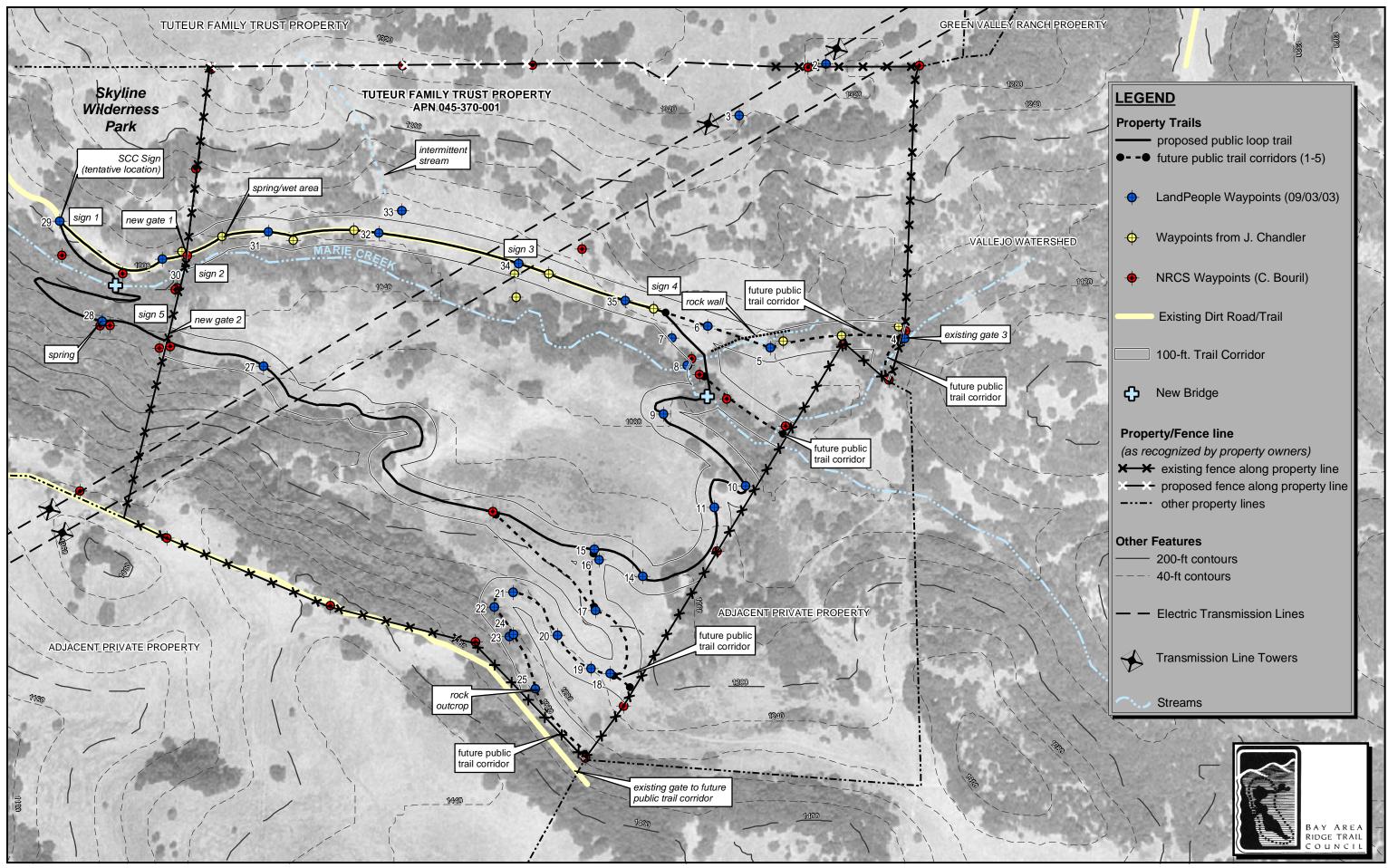




Figure 2: Napa-Solano Ridge Trail Parcel Map



The project site consists of a broad east-west trending valley, with ridgelines at the north and south boundaries. There are no structures on the property. Two PG&E transmission lines bisect the project site on a southwest and northeast line. Zoned "Agricultural Watershed," the current and long-term land use in the area of the proposed trail expansion and on adjacent properties is cattle grazing and undeveloped watershed.

Proposed Public Loop Trail Route

An existing network of trails (including the Bay Area Ridge Trail) provides access through Skyline Wilderness Park to the western edge of the project site, roughly one mile upstream of Lake Marie. The connecting trail is an old ranch road on the north side of Marie Creek that extends onto the Tuteur Family Trust property via an existing gate. The proposed project would create a loop trail by extending the existing trail into the Tuteur Family Trust property, as well as creating an additional trail segment within Skyline Wilderness Park to connect to the south end of the loop trail located within the Tuteur Family Trust property. Until such time as additional connections may be constructed to the proposed trail, the only access to the proposed loop trail would be via the existing trail in Skyline Wilderness Park, and trail users would park in the existing parking area at Skyline Wilderness Park.

The public loop trail would comprise a total of 7,212 lineal feet (approximately 1.37 miles), of which 5,562 lineal feet (approximately 1.06 miles) would be on the Tuteur Family Trust property, and 1,650 lineal feet (approximately 0.31 miles) would be in Skyline Wilderness Park. On the Tuteur Family Trust property, the proposed trail would utilize approximately 0.40 miles of existing dirt fire roads and ranch access roads, and construct approximately 0.66 miles of new trail. Thus, a total of approximately 0.97 miles of new trail would be constructed (0.66 miles on the Tuteur Family Trust property and 0.31 miles in Skyline Wilderness Park).

Minor realignments of the existing dirt road on the Tuteur Family Trust property would be required at global positioning system (GPS) waypoints 30 and 33 (see Figure 2: Napa-Solano Ridge Trail Parcel Map), due to the presence of wet areas along the existing road/trail. Near GPS point 7 (see Figure 2: Napa-Solano Ridge Trail Parcel Map), a new trail would be constructed on the Tuteur Family Trust property extending south across Marie Creek, winding up the slope on the south side of the valley, and extending west along the tree line to a proposed new gate into Skyline Wilderness Park. The portion of the proposed trail within Skyline Wilderness Park would switchback down the slope within a wooded area, re-cross Marie Creek, and climb up the bank to re-connect to the main trail.

Potential Future Public Trail Corridors

In addition to the proposed loop route described above, five potential future public trail corridors on the Tuteur Family Trust property are included as part of the proposed project. These potential trail corridors would allow for future continuation of the Ridge Trail on to neighboring properties, but they would not be improved or used for public trail access until such time as permission may be secured from the applicable property owners for adjacent public trail access.

The potential future corridors, which are included as part of the proposed Napa-Solano Ridge Trail project for planning purposes and to allow future continuation of the Ridge Trail, include (see Figure 2):

- 1. Upper Corridor: from upper loop trail southwest to the existing gate at Kirkland Cattle Company property;
- 2. Middle Corridor: from the upper loop trail east to an existing gate at the upper Fagundes property;
- 3. Lower Corridor: from north of Marie Creek east to an existing gate at the lower Fagundes property;
- 4. Vallejo Watershed Corridor: from the existing ranch road portion of the public loop trail to a gate into the City of Vallejo (Vallejo Lakes) property; and
- 5. Vallejo Watershed Corridor to Lower Corridor: from the Vallejo Lakes gate (see #4 above) south to the lower Fagundes property.

The proposed project analyzed by this Initial Study/Mitigated Negative Declaration (IS/MND) includes the portions of these five trail corridors within the Tuteur Family Trust property, but does not include construction of trails on the neighboring properties. Construction of trails on neighboring properties would not occur until such time as permission may be secured from the applicable property owners. In addition, separate approvals, including separate CEQA documentation, would be required for construction of trails on any of the neighboring properties.

Operation and Management Plan

An Operation and Management Plan (OMP) is required as part of the LTNC approval process.¹ The OMP addresses the construction and management of the Tuteur Family Trust Napa-Solano Ridge Trail segment, including the new trail construction in Skyline Wilderness Park. Key aspects of the OMP are summarized below. While the BARTC would initially be responsible for management of the trail, the BARTC intends to eventually assign the easement and management responsibilities to a third party, and is in discussion with Napa County and Skyline Wilderness Park Association regarding this assignment.

The OMP is subject to review and approval by John and Mary Holman Tuteur, Trustees of the Tuteur Family Trust, owners of the property, and grantors of the conservation and trail easements. In addition, the United States Department of Agriculture – Natural Resources Conservation Service (NRCS), which is consulting on this project, and the BARTC will review the OMP.

Proposed Trail Design

The trail corridor width would be fifty feet in each direction from trail centerline, except where it is closer than fifty feet to a property line. In these instances, the trail corridor width would be less. The proposed trail width is four feet. Pullouts would be installed in areas where line of sight is poor to allow users to pass safely. The trail would be unpaved and would be brushed to a ten-foot height to provide clearance for equestrians. The width of the cleared area along the trail would be brushed to six feet overall in the poison oak and chaparral communities. Trail treads would be at 1-3 percent out slope to allow for water drainage. The trail grade would be built between 7-15 percent, with the average grade of the entire trail expected to be less than 10 percent.

Switchbacks are proposed with a six-foot wide inside radius. Slope cuts would be sloped back to prevent cracking and erosion from uphill surface water. Down-slope fills would be raked out

¹ Bay Area Ridge Trail Council, Tuteur Ranch Operation and Management Plan, Draft, undated.

to allow accelerated native re-vegetation growth. 'Water Dips' (rolling dips in the trail which would divert water without presenting a berm or barrier to trail traffic) are proposed to take surface water off the trail at locations decided by a trail contractor to be hired by the BARTC, and the BARTC Trail Steward. (The BARTC employs a Trail Steward to oversee trail construction and management.) Proposed rock head walls for seasonal creek crossings would be constructed with native rock material.

Two bridges would be constructed; one located on the Tuteur Family Trust property, and one in Skyline Wilderness Park. The proposed truss-rail pedestrian/bicycle/equestrian bridges would be six feet wide, and designed to support 85 pounds per square foot live load. They would vary in length between 26 feet and 30 feet, and would be constructed of olive green fiberglass reinforced plastic and hot dipped galvanized hardware, with pressure treated Douglas Fir for bridge decking. Construction of all bridges would occur on site and would include concrete footings.

Any potential future extensions of the trail, such as the five potential future corridors discussed above, would be built to the same standards as the loop trail.

Proposed Trail Operations

The intended use of the proposed trail is a "Four Season Trail," for public, non-commercial, non-motorized, passive recreational foot, bicycle, and equestrian use. However, due to weather, fire, downed trees, mud flows, or other safety concerns or adverse conditions, the BARTC Trail Steward, in conjunction with Skyline Wilderness Park, may enact temporary closure to public use. BARTC proposes to assume all management and maintenance duties of the Tuteur Family Trust segment of the Napa-Solano Ridge Trail, including all signs, trail structures and bridges, brushing of the trail corridor, repair of tread, litter removal, and repair of any trail hazards that could be detrimental to the general public. Skyline Wilderness Park Association may take on the aforementioned duties in the future, with training and assistance from the BARTC Trail Steward.

The Skyline Trail use regulations listed below would also be applicable to the Napa-Solano Ridge Trail:

- No one on trails after sunset
- Observe and follow all trail signs
- Stay on mapped trails
- Pets prohibited in trail corridor
- No smoking
- No open fires except in designated areas
- No firearms
- Do not pick wildflowers nor disturb or remove wildlife plants or trees.

Skyline Wilderness Park also has specific set of mountain bike regulations that would apply to the Napa-Solano Ridge Trail.

Project Implementation and Schedule

The trail project is proposed to be constructed during summer and fall of 2005. Limited public use may begin in fall 2005, with full use by spring 2006.

9. Surrounding land uses and setting:

The proposed project site is located within an undeveloped area of eastern Napa County, near the border with Solano County. The approximately 106.75-acre project site is bordered on the northeast by Vallejo Lakes watershed property owned by City of Vallejo, while directly east and adjacent to the project site is a privately owned property. To the south is another privately owned parcel, and to the west and adjacent is Skyline Wilderness Park. To the north is additional Tuteur Family Trust property, and further northeast is the Green Valley Ranch.

10. Other public agencies whose approval is required:

- Erosion Control Plan/Permit from the County of Napa
- Building Permit from the County of Napa
- Grading Permit from the County of Napa
- Streambed Alteration Permit from California Department of Fish and Game

Preliminary studies for the Erosion Control Plan indicate that the trail project site's topography is such that a County Use Permit would not be required. However, this had not been confirmed by the County of Napa at the time this IS/MND was prepared, and it is therefore possible that a Use Permit may be required as part of the County erosion control process.

In addition to the public agency approvals listed above, the Tuteur Family Trust property is subject to a conservation easement held by The Land Trust of Napa County (The LTNC), a non-governmental organization, as discussed in 8. Description of Project, Introduction, above. The proposed trail project has received approval (a determination of consistency with the conservation easement) by The LTNC.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agricultural Resources		Air Quality
Biological Resources	Cultural Resources		Geology/Soils
Hazards & Haz. Materials	Hydrology/Water Quality		Land Use/Planning
Mineral Resources	Noise		Population/Housing
Public Services	Recreation		Transportation/Traffic
Utilities/Service Systems	Mandatory Findings of Sig	nifica	nce

DETERMINATION:

On the basis of this initial evaluation:
I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on the attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.
Signature Date
Printed name Date Outfirmia Coastal Conservancy For

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
EV	ALUATION OF ENVIRONMENTAL IMPACTS:				
l. /	AESTHETICS — Would the project:				
a)	Have a substantial adverse effect on a scenic vista?			X	
	olanation: Construction and use of the proposed loop I corridors would have a less than significant impact a.				
b)	Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
trai tree the fou sub	olanation: Construction and use of the proposed loop I corridors would not substantially damage existing so as and rock outcroppings. As discussed in Item V.a, rock walls that make up the recorded historic site CA indations and seventeen rock fence alignments). Constantially damage this scenic resource, and the effect of significant. (The historic site is discussed in more	cenic resorbelow, the A-NAP-586 nstruction of the pr	urces at the e trail corrido 6H (which co and use of to oposed proj	site, includes on sists of the trails weet would	ding one of wo rock ould not
c)	Substantially degrade the existing visual character of quality of the site and its surroundings?	or		X	
deg	olanation: As discussed in Items I.a and I.b above, the grade the existing visual character or quality of the site ects of the proposed project would be less than sign	te and its s			
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime view in the area?	ys		X	
	olanation: The proposed trail would not involve night			•	

light and glare would be *less than significant*.

		Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II.	whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			X	
no	<u>planation:</u> The project site is currently in active agricularity prime farmland on the site. The proposed trail project agricultural uses of the site. This would be a less	ct would n	ot preclude	future graz	
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
Agr Wh are agr	<u>clanation:</u> The project site's land use designation in the ciculture, Watershed & Open Space, and the site is zo ille the Operation and Management Plan calls for terms a during its curing period, this would not conflict with iculture (grazing), nor would the operation and use of site. Thus, the project would not conflict with the exi	oned AW (porarily ex the long-te f the trail c	Agricultural ccluding cat erm use of t onflict with a	Watershed tle from the he site for agricultural	trail
The	e project site is not subject to a Williamson Act contra	ct.			
Imp	pacts on agricultural zoning and Williamson Act contra	acts would	be <i>less th</i>	an signific	ant.
c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?			X	

² Napa County Board of Supervisors, Napa County General Plan, adopted June 7, 1983, as amended through December 3, 1998, Figure 80, page 8-19.

		Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
spa	<u>planation:</u> The proposed project site and surrounding ice uses. Construction and use of the proposed trail ridors would not result in the conversion of any additions would be a less than significant impact.	and the fiv	e potential	future publ	ic trail
qua	AIR QUALITY — Where available, the significance lity management or air pollution control district may erminations. Would the project:		-		
a)	Conflict with or obstruct implementation of the applicable air quality plan?			X	
Exp	olanation: See Item III.b, below.				
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	
_					

Less Than

<u>Explanation</u>: Air quality impacts from a project, such as the proposed new trail, result from project construction and operation. Construction emissions, primarily fugitive dust and criteria air pollutants emitted by construction vehicles and equipment, would have a short-term effect on air quality. Operational emissions, generated by project-related traffic, would continue to affect air quality throughout the lifetime of the project.

Construction activities would generate exhaust emissions and fugitive particulate matter emissions that would temporarily affect local air quality during the approximately six-month construction period. Fine particulate matter (PM_{10}) is the pollutant of greatest concern with respect to construction.³ PM_{10} emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. Although it is more of a nuisance than a hazard for most people, this dust could affect persons with respiratory diseases, as well as sensitive electronic or communications equipment.

Construction of the proposed trail project would involve excavation and grading, using a variety of hand tools and small mechanized equipment, of approximately 0.97 miles new trail with a width of approximately four feet plus 18 inches to two feet of upslope excavation. Much of the construction would be done by hand. Construction would involve minimal truck travel on

³ Bay Area Air Quality Management District, *BAAQMD CEQA Guidelines*, *Assessing the Air Quality Impacts of Projects and Plans*, December 1999.

unpaved roads, and would not involve hauling of soil by truck, major excavation, demolition, or stockpiles of soil. The width of the trail plus upslope excavation would be relatively narrow (approximately six feet), and the area of exposed earth that could generate dust in windy conditions would be correspondingly small. Construction activities would not involve burning of any materials (cleared vegetation would be mulched and spread at the project site).

For these reasons, fugitive dust and vehicle emissions due to construction would be small, and the air quality impact would be *less than significant*.

Project operation and use could affect local air quality by increasing the number of vehicles on nearby roads and at the project site, and by introducing stationary emissions to the project site. Transportation sources are the primary source of operational project-related emissions.⁴ The proposed trail project would not generate substantial amounts of stationary source emissions (such as combustion of natural gas for building space and water heating).

The operation of a project would have a significant effect on the environment with respect to air quality if it would violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The BAAQMD specifies the significance criteria as follows⁵: (1) project impacts would be considered significant if they cause operation-related emissions equal to or exceeding an established threshold of 80 pounds per day of reactive organic gases (ROG, also known as reactive hydrocarbons), nitrogen oxides (NOx including NO₂),⁶ or PM₁₀, (ozone precursors), or cause carbon monoxide (CO) concentrations to exceed the state ambient air quality standards of more than 550 pounds per day of emissions; and (2) project impacts would also be considered to have a significant contribution to cumulative regional air quality effects if the project impacts exceed these standards.

Project-related traffic may result in areas with high concentrations of carbon monoxide around stagnation points such as major intersections and heavily traveled and congested highways. The BAAQMD has identified three threshold standards, any one of which would require the estimation of local carbon monoxide concentrations⁷:

- Project related vehicle CO emissions would exceed 550 pounds per day.
- Project generated traffic would impact intersections or roadway links operating at Level
 of Service (LOS) D, E or F or would cause LOS to decline to D, E or F.; and
- Project traffic would increase traffic volumes on nearby roadways by ten percent or more.

⁵ BAAQMD CEQA Guidelines, op. cit.

⁴ Ibid.

⁶ Nitrogen Oxides are a class of pollutants comprised of N and O. Of the several nitrogen oxides, only one (NO₂) is considered a primary pollutant with a specific air quality standard. All nitrogen oxides are contributors to ozone formation.

⁷ BAAQMD CEQA Guidelines, op. cit.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
pote	e trip generation of the proposed project would be well entially significant emissions of ROG, NOx, or PM ₁₀ . The above thresholds for carbon monoxide.				
sub sub	erefore, the proposed project would not exceed the BA stantially to an existing or projected air quality violatic stantial pollutant concentrations. Operational air qua acts of project operation, would be less than signific	on, or expo lity impac	ose sensitiv	e receptor	
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
Exp	lanation: See Item III.b, above.				
d)	Expose sensitive receptors to substantial pollutant concentrations?			X	
Exp	lanation: See Item III.b, above.				
e)	Create objectionable odors affecting a substantial number of people?			X	
	<u>clanation</u> : The construction and use of the proposed to rs. This would be a less than significant impact.	trail would	l not genera	ite substan	tial new
IV.	BIOLOGICAL RESOURCES — Would the project:	:			
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		

Explanation:

Introduction

An analysis of potential impacts of the proposed project on biological resources was conducted by an independent consultant, and the results are presented below.

Vegetation Cover and Wildlife Habitat

The project site features mixed oak woodland, grassland, and chaparral vegetation cover and wildlife habitat types. The mixed oak woodland vegetation cover consists primarily of coast live oak (*Quercus agrifolia*) and California bay (*Umbellularia californica*), with an occasional madrone (*Arbutus menziesii*). The major grass species in the non-native grassland cover include soft chess (*Bromus hordeaceus*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), ripgut brome (*Bromus diandrus*), Italian ryegrass (*Lolium multiflorum*) and wild oat (*Avena barbata*). Native grasses are sparsely distributed in the annual grassland cover. These perennial, native grasses include California oatgrass (*Danthonia californica*) and purple needlegrass (*Nassella pulchra*). The dominant chaparral cover consists of relatively uniform stands of coyote brush (*Baccharis pilularis*) but an occasional manzanita (*Arctostyphylos manzanita*) may be present as individual specimens.

Marie Creek is the main riparian corridor on the site. The creek splits into two tributaries near the eastern boundary of the site. Marie Creek falls under a "Class III Stream" pursuant to the Napa County Regulations (Ordinance No. 1221, Floodplain Management and Conservation Regulations). A "Class III" stream is defined as an "…intermittent or ephemeral watercourse having a defined channel with a defined top of bank (slope break) an a width ratio of 5:1 or less showing evidence of annual scour and sediment transport."

Small wet areas, commonly referred to as wetland seeps or springs, are located on the western portion of the project area, within the boundaries of Skyline Wilderness Park.

Wildlife associated with the vegetation cover and habitat types are expected to include large mammals such as mountain lion and deer, mid-sized mammals such as fox and raccoon, and small mammals such as western gray squirrel and various mice. Many species of birds use the area seasonally or are year-round residents. These include such raptors as golden eagle and redtail hawk; and passerine birds such as northern flicker, scrub jay, junco, sparrow, and meadowlark.

Reptiles are also likely to occur in grasslands on the site. They include western fence lizard (*Sceloporus occidentalis*) and gopher snake (*Pituophis melanoleucus*). Amphibians such as the Pacific tree frog (*Hyla regilla*) probably disperse and forage in non-native annual grasslands in the winter.

⁸ Holton, Booker, TOVA Applied Science and Technology, *2004 Biological Resource Assessment, Tuteur Property Trail Project*, 20 January 2004.

Regulatory Framework for the Protection of Biological Resources

Federal and state statutes have been promulgated to protect wetlands and special-status species, both of which are considered sensitive biological resources or resources of special concern. Wetlands (discussed in Item IV.c, below) are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife.

Special-status species are plants and animals that are legally protected under state and/or federal Endangered Species Acts or other regulations. These include species that are considered rare enough by the scientific community, such as the California Native Plant Society (CNPS), and trustee agencies to warrant special consideration.

Special-Status Plants

California Natural Diversity Data Base (CNDDB 2001) records indicate that special-status plants are known to occur in the general vicinity of the Tuteur Family Trust property (see Table 1).

Table 1: Special Status Plant Species That Have Been Recorded in the Vicinity of the Project Site					
Species	Status*	Blooming Period	Habitat Notes		
Amorpha californica var. napensis	1B	April-July	Broadleaf upland forest openings, chaparral, cismontane woodland.		
Napa false indigo					
Astragalus clarianus	FE, ST, 1B	March-May	Chaparral openings, cismontane woodlands, and		
Clara Hunt's milk-vetch			grassland on serpentine, volcanic, rocky, and clay soils.		
Brodiaea californica var. leptandra	1B	May-July	Broadleaf upland forest, chaparral, lower montane coniferous forest.		
Narrow-anthered California brodiaea					
Calochortus uniflorus	Locally Rare	April-June	Northern coastal scrub, north coast coniferous		
Large-flowered pink star tulip			forest, mixed evergreen forest, redwood forest, and closed-cone pine forest.		
Ceanothus confuses	1B	February-April	Closed-cone coniferous forest, chaparral, grasslands		
Rincon Ridge ceanothus					
Ceonothus divergens	FSC, 1B	February-	Chaparral on serpentinite or volcanic, rocky soils		
Calistoga ceanothus		March			
Ceanothus pupureus	1B	February-June	Chaparral and cismontane woodland on volcanic		
Holly-leaved ceanothus			and rocky soils.		
Ceanothus sonomensis	1B	February-April	Chaparral (sandy, serpentinite or volcanic)		
Sonoma ceanothus					
Cryptantha hispidula	Locally Rare	April-June	Chaparral, yellow pine forest on serpentinite soils.		
Napa cryptantha					
Downingia pusilla	2	March- May	Annual herb present in valley and foothill grasslands (mesic) and vernal pools. Known from areas east of		

Table 1: Special Status Plant Species That Have Been Recorded in the Vicinity of the **Project Site Species** Status* **Blooming Habitat Notes** Period Castle Peak. Dwarf downingia 1B May- Sept. Perennial herb present in serpentine chaparral. Erigeron angustatus Known from vicinity of Soda Creek Road and Sage Narrow-leaved daisy Canyon, east of Lake Hennessey. FE. 1B March-June Shallow volcanic soils in chaparral (Napa County), Lasthenia conjugens grassland, vernal pools, or low depressions and Contra Costa goldfields swales in grassy areas. Limnanthes vinculans FE, SE, 1B April - May Meadows and vernal pools. Sebastopol meadowfoam FSC. 1B Hesperolinon May-July Serpentine barrens at edge of chaparral. Known bicarpellatum from the Sage Creek area. Two-carpellate western Hesperolinon 1B May-July Serpentine chaparral. Known from area between serpentinum Rector Valley and Sage Canyon, between Lake Hennessey and Atlas Peak. Napa dwarf flax Layia septentrionalis 1B Chaparral. Cismontane woodland and grassland on April-May sandy, serpentinite. Colusa lavia 1B Chaparral, cismontane woodland usually on volcanic Linanthus jepsonii April-May Jepson's linanthus Lomatium repostum 4 March-June Chaparral, cismontane woodland on serpentinite Napa Iomatium Lupinus sericatus 1B March-June Broadleaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest. Cobb Mountain lupine Monardella viridis ssp. July -Chaparral, broadleaf upland forest, cismontane viridis September woodland Green monardella Cismontane woodland, lower montane coniferous Navarretia leucocephala 1B May-July ssp. bakeri forest, meadows, grassland, vernal pools. Baker's navarretia Vernal pools, large meadows surrounded by Navarretia leucocephala FE, ST, 1B May-July ssp. pauciflora chaparral, rocky outcrops, springs. Few-flowered navarretia Navarretia rosulata 1B May-July Closed-cone coniferous forest and chaparral on serpentinite and rocky soils. Marin County navarretia Penstemon newberryi var. 1B Crevices in rock outcrops and talus slopes in June-August sonomensis chaparral. Known from Rector Reservoir. Sonoma beardtongue Chaparral, broadleaf upland forest Ribes victoris 4 March-April Victors Goosebery 1B July-August Meadows, riparian forest on mesic soils. Sidalcea oregana ssp. hydrophila

Table 1: Special Status Plant Species That Have Been Recorded in the Vicinity of the Project Site							
Species	Status*	Blooming Period	Habitat Notes				
Marsh checkerbloom							
Streptanthus breweri var. hesperidis	1B	May-July	Chaparral openings and cismontane woodland on serpentinite and rocky soils.				
Green iewel-flower							

*Key to status codes:

FE Federal Endangered

FSC Federal Species of Concern

SE State Endangered

ST State Threatened

1B List 1B CNPS list of plants rare, threatened or endangered in California and elsewhere

2 List 2 CNPS list of plants rare, threatened, or endangered in California but more common elsewhere.

4 List 4 CNPS list of plants having limited distribution

Source: CNDDB (St. Helena, Chiles Valley, Lake Berryessa, Rutherford, Yountville, Capell Valley, Sonoma, Napa, and Mount George quadrangles - 2001) and Napa County Environmental Sensitivity Maps.

Some of these species occur within such habitat types as serpentine soils or within specialized habitat types, such as vernal pools, or within specific vegetation cover types, such as broadleaf upland forests and coniferous forests. These habitats and soil conditions do not occur on the project site and would rule out the potential occurrence of some of these species (see Table 2).

Based on vegetation habitat cover types, seven special status plant species (indicated in Table 2 by the shaded boxes) could occur and be adversely affected by the construction of the multiuse trail:

- Napa false indigo (Amorpha californica var. napensis)
- Contra Costa goldfields (Lasthenia conjugens)
- Cobb Mountain lupine (Lupinus sericatus)
- Green monardella (Monardella viridis ssp. viridis)
- Few-flowered navarretia (Navarretia leucocephala ssp. pauciflora)
- Victors gooseberry (*Ribes victoris*)
- Marsh checkerbloom (Sidalcea oregana ssp. hydrophila)

No focused surveys have been conducted during the appropriate flowering period for these potentially occurring species. If such species were affirmed to be present on the site, the loss of a population of special status species would represent a potentially significant impact. The assessment of impact significance would depend on the size of the population, the number and condition of individual plants, and the distribution of the plant's population on the site.

The trail corridor width is planned at 100 feet (50 feet in each direction from trail centerline) except where it is closer than 50 feet to a property line, where it would be less. The proposed trail width is four feet. Pullouts and added trail width, up to 6 feet, in coyote brush cover, and bridge abutments would also be constructed. The relatively wide trail corridor allows for the readjustment of the trail alignment to respond to local site conditions.

Table 2: Potential Occurrence of Special-Status Plants on the Project Site			
Species	Occurrence		
Amorpha californica var. napensis Napa false indigo	The grassland vegetation understory intermixed with oak trees provide habitat but no site–specific surveys have been conducted.		
Astragalus clarianus Clara Hunt's milk- vetch	The habitat for this species does occur but the probability of the species occurring is low due to the heavy growth of non-native grasses.		
Brodiaea californica var. leptandra	The habitat for this species does not occur on the site.		
Narrow-anthered California brodiaea			
Calochortus uniflorus	Meadows do not occur on the project site.		
Large-flowered pink star tulip			
Ceanothus confuses Rincon Ridge ceanothus	Forest or chaparral habitat for this species does not occur on the site and Dr. Booker Holton found no Ceanothus plants during a November 2003 field survey.		
Ceonothus divergens Calistoga ceanothus	The habitat for this species does not occur on the site. Serpentine-derived soils are not present. Dr. Booker Holton found no Ceanothus plants during a November 2003 field survey.		
Ceanothus pupureus Holly-leaved ceanothus	Habitat is present on the site but Dr. Booker Holton found no Ceanothus plants during a November 2003 field survey.		
Ceanothus sonomensis Sonoma ceanothus	Habitat is present on the site but Dr. Booker Holton found no Ceanothus plants during a November 2003 field survey.		
Cryptantha hispidula Napa cryptantha	The habitat for this species does not occur on the site. Serpentinite soil type is not present.		
Downingia pusilla Dwarf downingia	Vernal pools do not occur on the project site.		
Erigeron angustatus Narrow-leaved daisy	The habitat for this species does not occur on the site. Serpentinite soil type is not present.		

Lasthenia conjugens Contra Costa goldfields	The grassland vegetation understory intermixed with oak trees provide habitat but no site–specific surveys have been conducted.
Limnanthes vinculans Sebastopol meadowfoam	Meadows and vernal pools do not occur on the project site.
Hesperolinon bicarpellatum Two-carpellate western flax	The habitat for this species does not occur on the site. Serpentinite soil type is not present.
Hesperolinon serpentinum Napa dwarf flax	The habitat for this species does not occur on the site. Serpentinite soil type is not present.
Layia septentrionalis Colusa layia	The habitat for this species does not occur on the site. Serpentinite soil type is not present.
Linanthus jepsonii Jepson's linanthus	The habitat for this species does not occur on the site. Serpentinite soil type is not present.
Lomatium repostum Napa Iomatium	The habitat for this species does not occur on the site. Serpentinite soil type is not present.
Lupinus sericatus Cobb Mountain Iupine	The oak woodland provides potential habitat but no site–specific surveys have been conducted.
Monardella viridis ssp. viridis Green monardella	The oak woodland provides potential habitat but no site–specific surveys have been conducted.
Navarretia leucocephala ssp. bakeri	Vernal pools do not occur on the project site
Baker's navarretia Navarretia leucocephala ssp. pauciflora Few-flowered navarretia	The wet soil habitats associated with Marie Creek and areas of springs provides potential habitat but no site-specific surveys have been conducted. Vernal pools do not occur on the project site.
Navarretia rosulata Marin County navarretia	The habitat for this species does not occur on the site. Serpentinite soil type is not present.

Penstemon newberryi var. sonomensis	Outcrops and talus slopes do not occur on the project site. The habitat for this species does not occur on the site.
Sonoma beardtongue	
Ribes victoris	The oak woodland provides potential
Victors Goosebery	habitat but no site–specific surveys have been conducted.
Sidalcea oregana ssp. hydrophila	The wet soil habitats associated with Marie Creek and areas of springs
Marsh checkerbloom	provides potential habitat but no site- specific surveys have been conducted.
Streptanthus breweri var. hesperidis	The habitat for this species does not occur on the site. Serpentine soil is not present.
Green jewel-flower	

The proposed project's effect on special status plants is a **potentially significant** impact that would be reduced to a **less-than-significant** level by implementation of the following mitigation measure.

Mitigation Measure 1:

A. A pre-construction survey shall be conducted to identify the occurrence of special-status plants within the trail corridor. The survey shall be conducted at the appropriate months to correspond to the known flowering periods of such species (Table 1) or during the spring/early summer when diagnostic vegetative characteristics of special status plants are discernable. The survey shall be conducted using the methods and procedures adopted by the California Native Plant Society. No ground/vegetation disturbing activities shall commence on-site until such survey has been completed and it is determined that a special-status plant does not occur in the trail corridor.

If the Napa false indigo, Contra Costa goldfields, Cobb Mountain lupine, green monardella, or Victors gooseberry are not found to occur within the trail corridor, trail construction would occur in upland areas before construction of the bridged creek crossings. The bridge crossings of Marie Creek would then be surveyed to determine the presence or absence of riparian or wetland species (i.e., few-flowered navarretia and marsh checkerbloom). If vegetation habitat or suitable substrate for these species is not present at the proposed bridge crossings, wooden stakes shall be installed to define the construction zone of allowable ground disturbance activities. The bridge crossing of Marie Creek would proceed with the implementation of this protective measure.

Initial Study: Napa-Solano Ridge Trail Project

¹⁰ CNPS. 2001. Inventory of Rare and Endangered Plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA x +388pp.

- B. If special status-species are found within the trail corridor, the trail shall be realigned to avoid impact to the plant population, if feasible. Prior to the implementation of the proposed project, a qualified botanist shall flag areas supporting the identified special-status species. This flagged area would designate those plant populations to be protected. The proposed trail construction may proceed if such identified plant populations can be avoided.
- C. Where the loss of a population/stand of a special-status plant is unavoidable, a qualified botanist shall make a determination as to whether or not the proposed trail would jeopardize the plant's existence in the region. If it is determined that such would occur, compensatory mitigation shall be implemented as follows:
 - 1. Areas near the proposed trail alignment; either presently supporting or potentially supporting the identified special status plant populations, shall be established at a ratio of 2:1 (area established: area impacted). The location of the mitigation area, including the suitability of lands designated as "no land clearing" on the trail plan, shall be determined in cooperation with and subject to the approval of Napa County and, as appropriate, the CDFG.
 - 2. The information on the plant population, anticipated impact and proposed mitigation shall be provided to the Easement Monitoring Coordinator for the Land Trust of Napa County, which holds a conservation easement on the property.
 - 3. The mitigation area shall be enhanced if the habitat already supports a population of the target special status species, or shall be restored if the target species is not present but the habitat is suitable to support such species. In either case, the following measures shall be implemented:
 - a. Seeds of the target special status species shall be collected from the project impact area during the appropriate developmental stage of the plants and broadcast in the mitigation area.
 - b. Some of the seeds shall be appropriately stored/germinated and grown for seed production in a nursery familiar with growing native plants.
 - c. A Rare Plant Mitigation and Monitoring Plan shall be developed to provide for the long-term protection of the target special status species population established in the mitigation area. The Easement Monitoring Coordinator for the Land Trust of Napa County shall approve this Plan after consultation with the CDFG and the local chapter of the CNPS. The plan shall define procedures and provide guaranteed funding for seed collection, transplanting, and monitoring and achieving success criteria. The monitoring shall be continued annually for a minimum of 5 years or until a self-reproducing plant population has been established on the site for a minimum of 3 consecutive years without significant human assistance (i.e., replanting).
 - d. Contingency measures shall be implemented, as required, to satisfy the specific success criteria specified in the Plan.

Special Status Wildlife

California Natural Diversity Data Base (CNDDB 2001) records also indicate that special-status animals are known to occur in the general vicinity of the project site (see Table 3).

Table 3: Special Status Project Site	Animal Sp	pecies That Have Been Recorded in the Vicinity of the
Species	Status*	Habitat Notes
Rana aurora draytonii	FT, SSC	Lowlands & foothills in or near permanent sources of water with dense,
California red-legged frog		shrubby or emergent riparian vegetation.
Rana boylii	SSC	Species known to occur in shallow streams & riffles with rocky
Foothill yellow-legged frog		substrate. Recorded from the Dry Creek tributary to the Napa River.
Haliaeetus leucocephalus (Nesting & Wintering)	FT, SE	Known to roost around Lake Hennessey.
Bald eagle		
Aquila chrysaetos (Nesting & Wintering)	SSC	Open grassland, woodland, and chaparral. Nests on cliffs and in tall trees.
Golden eagle		
Clemmys marmorata marmorata	SSC	Associated with permanent water. Known from Conn Creek & west of Lake Hennessey.
Northwestern pond turtle		
Elanus leucurus (nesting)	MNBMC	Nests in foothills/valley margins with scattered oaks and river bottoms
White-tailed kite		or marshes near deciduous woodland
Strix occidentalis caurina	FT, SSC	Oldgrowth forests or mixed stands of old- growth and mature trees.
Northern spotted owl		
Antrozous pallidus	SSC	Grasslands, shrublands woodlands and forests. Dry habitats with rocky
Pallid bat		areas or houses for roosting.
Corynorhinus townsendii townsendii	SSC	Roost in limestone caves, lava tubes, mines, and buildings
Townsend's western big- eared bat		
Athene cunicularia	SSC	Open, dry grassland and scrubland often in ground squirrel burrows.
Burrowing owl		

*Key to status codes:

FE Federal Endangered
FT Federal Threatened
SE State Endangered

SSC State Species of Special Concern

MNBMC Federal Migratory Nongame Birds of Management Concern

Table 3: Special Status Animal Species That Have Been Recorded in the Vicinity of the Project Site				
Species Status* Habitat Notes		Habitat Notes		
Source: CNDDB (St. Helena, Chiles Valley, Lake Berryessa, Rutherford, Yountville, Capell Valley, Sonoma, Napa, and Mount George quadrangles - 2001)				

Streams, creeks and ponds may provide suitable habitat for the California red-legged frog, foothill yellow-legged frog, and northwestern pond turtle. Marie Creek and the freshwater springs are seasonally wet areas, however; these areas may not be suitable habitat for the red-legged frog, yellow-legged frog, and pond turtle (see Table 4).

There are no old-growth forests or mixed stands of old growth and mature trees in the project area, therefore; the site doe not provide suitable habitat for the northern spotted owl (see Table 4). Ground squirrel burrows and other suitable habitat for burrowing owl or signs of owl use were not found during a November 2003 field survey. There are no building structures, caves or large trees with cavities on the site such that suitable habitat for the pallid bat or Townsend's western big-eared bat is present (see Table 4).

Bald eagles may occasionally fly over the area, as is the case throughout Napa County, but they do not nest on the area proposed for the trail. Eagles develop nests in relatively tall trees adjacent to or near large bodies of surface water such as lakes, reservoirs, and large streams. Such features do not exist on the project site proposed for the trail (Table 4). In addition, golden eagles may frequently fly over the area but usually nest in cliffs or very tall trees (Table 4). During the November field survey, no nests of the white-tailed kite were found on the site. Such a nest would be a bulky mass of small fine twigs in a deeply hollowed tree cavity.

Table 4: Potential Occurrence of Special Status Animal Species along the Proposed Trail Alignment			
Species Potential Occurrence			
Rana aurora draytonii California red-legged frog	Low Potential: impounded surface water habitats or emergent wetlands vegetation are absent from the project site. There is no aquatic habitat on the site. The project site is marginal as frog dispersal habitat.		
Rana boylii Foothill yellow-legged frog	Low Potential: impounded surface water habitats or emergent wetlands vegetation absent from the project site. There is no aquatic habitat on the site.		
Haliaeetus leucocephalus (Nesting & Wintering) Bald eagle	Low Potential: There are no tall trees near surface water or streams with fish on the project site. Bald eagles were not observed to use the project site. Known to roost around Lake Hennessey.		
Aquila chrysaetos (Nesting & Wintering) Golden eagle	Low Potential: No suitable cliffs or large trees or structures are present on the project site. Golden eagles were not observed using the project site.		

Field Visit conducted on November 19, 2003 by Booker Holton, Ph.D., TOVA Applied Science and Technology, and John Aranson, Trail Steward, Bay Area Ridge Trail Council.

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Table 4: Potential Occurrence of Special Status Animal Species along the Proposed Trail Alignment			
Species	Potential Occurrence		
Clemmys marmorata marmorata	Low Potential: Permanent water or aquatic habitat does not occur on the project site. Western pond turtle was not observed using the project site.		
Northwestern pond turtle			
Elanus leucurus (nesting) White-tailed kite	Low Potential: Species is known to nest in shrubs and trees adjacent to grasslands. Such habitat features do not occur on the project site. White-tailed kite was not observed using the project site		
Strix occidentalis caurina Northern spotted owl	Low Potential: There are no old-growth coniferous forests or mixed stands of old growth and mature conifer trees on the project site.		
Antrozous pallidus Pallid bat	Low Potential: Roosting habitat such as rock outcrops, caverns, hollow trees, buildings and bridge abutments do not occur on the project site.		
Corynorhinus townsendii townsendii	Low Potential: Roosting habitat such caverns, mine shafts, and buildings do not occur on the project site		
Townsend's western big- eared bat			
Athene cunicularia Burrowing owl	Low Potential: There are no significant assemblages of ground squirrel or ground squirrel burrows present. Owls or their sign was not found in the grassland habitat or along rock walls.		

During that same November survey, however, one potential raptor nest was found 70 feet from the trail alignment on the south side of the project site. The nest, a stick structure, was identified in a live oak tree. By the relatively small size of the nest, it appeared not to be a golden eagle nest, but rather another raptor type, perhaps a red-tailed hawk. At the time of the November survey, the nest was inactive. The nesting season for raptors generally begins in early February and continues until the end of August. Due to the presence of suitable nesting habitat, raptors could nest at some future time in the trees on or near the project site. The effect on nesting raptors is a **potentially significant** impact that would be reduced to a **less-than-significant** level by implementation of the following mitigation measure.

Mitigation Measure 2:

- A. A qualified biologist shall conduct a pre-construction survey to determine if the nest is occupied. The survey shall occur within 14 days prior to the initiation of trail construction activities during the early part of the breeding season (January through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through September). An active nest would be indicated by one or more of the following:
 - 1. Incubation behavior of adults (e.g., regular periods of "disappearance" into the same location followed by short, secretive flights to forage)
 - 2. Extreme distress and alarm calls when in close vicinity of the nest tree
 - 3. Observation of food being carried on the beak or claws to the nest

	Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	B. If the nest is active, the proposed trail alignment betwee be located at least 100 feet from the live oak tree containing following measures shall be implemented to protect the new properties.	ng the nest s		
	 Establishment of a buffer using flagging or staking with CDFG recommendations until the young have flee monitored a minimum of once per week to confirm tha that no new nesting pairs are present before the buffer 	dged. The not the young h	est tree sha nave fledge	all be
	If it is not feasible to delay or modify construction a CDFG shall be contacted to discuss alternative buffer		ınd the tree	, the
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X	
the two wide foot dam	Explanation: A riparian plant community characterized as a dominanopy, with an occasional coast life oak, occurs along Marie Creme northeast portion the project site. The proposed trail alignment wo locations. A bridge would be constructed at each crossing. Exide truss-rail structure that would vary in length between 26 feet potings would be installed as to not impede creek water flow or camage to the stream. At each of the creek crossings, rock-lined hade of rock would be installed.	eek and its m nt would cros Each bridge v t and 30 feet. cause second	ajor tributa ss Marie Cr would be a Bridge co lary erosior	eek at 6-feet ncrete
Cali Gar cha ripa	The Bay Area Ridge Trail Council has obtained a Streambed Alte California Department of Fish and Game pursuant to Section 160 Game Code. This code pertains to activities that would disrupt the hannel, bed or bank of any lake, river or stream. The proposed parian habitat or other sensitive natural communities, and this in <i>ignificant.</i>	11-1603 of the ne natural flow trail would no	e State Fish w or alter th ot adversely	n and le y affect
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X	

Less Than

	Potent Signific Impa	S tially cant N	ess Than ignificant With ditigation corporated	Less Than Significant Impact	No Impact
Engi pool: esta disch perm unde woul requ	planation: The California Department of Fish and Game (Cigineers (USACE) have jurisdiction over modifications to riverals, lakes, stream channels and other wetland features. Jurisdished through the provisions of Section 404 of the Clear charge of dredged or fill material into "waters" of the U.S. (imit. Jurisdictional authority of the CDFG over wetland and ler Sections 1601-1606 of the Fish and Game Code. This all disrupt the natural flow or alter the channel, bed or bankuires an agreement identifying appropriate mitigation before CDFG.	erbanks risdiction Water including I ripariar code pe k of any	s, seasona n of the U Act, whic g wetland n areas is ertains to lake, rive	al ponds, v ISACE is h prohibits s) without establishe activities w er or strear	ernal the a ed hich n, and
Engi surfa circu	der the Clean Water Act Section 404 and regulations admir gineers (Corps), a wetland is defined as being an area that face or ground water at a frequency and duration sufficient umstances do support, a prevalence of vegetation typically ditions."	is "ir to supp	nundated oort, and t	or saturate hat under	ed by normal
a we the (area west not r	the Corps definition, three defining conditions or criteria muetland – hydrology, soil, and vegetation. One potential juri Corps exists on the site between Waypoints 29 and 30. To a (approximately 75 feet long) located at the edge and parast of an existing gate. The trail alignment would be located result in the placement of fill within a wetland. The trail wo erally protected wetlands.	isdiction his sed allel to t I away f	al wetlange and rushe farm rom this a	d as define sh domina oad immed irea and w	ed by ted wet liately ould
the p	er isolated freshwater seep/spring areas occur elsewhere oproject area. These are either relatively wet, unvegetated strate. Wetland indicator plant species do not occur on the ough to be avoided by the trail alignment.	wet are	as on soi	l or rocky	
The	e impact of the proposed project on wetlands would be less	s than s	significan	nt.	
	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with any established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
mov	<u>planation:</u> The construction of the multipurpose trail would revenent through the project area but proposed new boundated on such wildlife movement. An existing property fence eastern edge of the trail project area. A proposed new both	ary fenci e line is	ng could located or	have adve n the south	ı, west,

	Significant		
Potentially Significant	With Mitigation	Less Than Significant	No
Impact	Incorporated	Impact	Impact

along the northern portion of the area. Fencing of the entire project area could interfere with the normal movement of native resident wildlife species such as deer, mountain lion, raccoon, and coyote. Smaller mammals such as black-tailed hare, skunk, and opossum can also be impeded if the lower portions of the fence have a smaller mesh size. Unless appropriately designed, fences prevent or hinder dispersal of terrestrial wildlife by creating barriers, bifurcating habitat, and restricting access to watercourses, feeding sites, and sheltering cover and can create or increase predation pressures by eliminating or minimizing escape routes. This is a **potentially significant** impact that would be reduced to a **less-than-significant** level by implementation of the following mitigation measure.

Mitigation Measure 3: All property-line fencing shall be limited to barbed wire or other similar fencing that does not restrict the movement of terrestrial wildlife.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?



Less Than

<u>Explanation:</u> Trail construction would require that all limbs of trees adjacent to the trail alignment be brushed to a height of 10 feet to provide clearance for equestrians. As proposed, any limbs and branches removed would be cut flush to the trunk of the tree. Section 18.108.100 of the Napa County Conservation Regulations requires a permit for the removal of all trees six inches in diameter or larger, as measured at 4.5 feet above the ground (Diameter "at breast height" or DBH). It is not anticipated that any trees would need to be removed to construct the trail, but unexpected obstacles may be encountered during trail construction that would require removal of a small number of trees. This is a *potentially significant impact* on existing trees during trail construction, which would be reduced to a *less than significant* level by the following mitigation measures.

Mitigation Measure 4:

- A. No activities that might cause damage to the root systems by earth-moving equipment shall be allowed.
- B. Temporary flagging or staking shall be placed around those trees that are near the trail but not proposed for limb removal. The temporary flagging or staking shall be installed at a distance equal to one-half of the canopy radius measured outward from the edge of the dripline. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated protective zone for the duration of the project.

Although the project as currently proposed is not anticipated to require tree removal, unexpected obstacles encountered during construction could necessitate removal of a small

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
number of trees. If any tree(s) larger than 6 inches DBH measures shall apply.	are remo	ved, the foll	owing mitig	gation	
C. Compensatory tree replacement shall be prove than 6 inches diameter that are proposed for remo		native oak o	r bay trees	greater	
 Replacement of native oak or bay trees sh gallon trees for each tree removed (2:1 ratio). 	all be acı	hieved by pl	anting two	fifteen-	
 Replacement trees shall be planted betwe nursery stock from local sources. The trees so and protected from herbivores to ensure their watering, and seedling protection will be admit Coordinator for the Land Trust of Napa County 	hall be irr survival. nistered l	rigated by ha Seedling tr	and for thre ee planting	ee years I,	
 Annual monitoring of the planted trees sha time of planting. Monitoring reports shall be so Monitoring Coordinator for the Land Trust of N 	ubmitted	annually to	•		
 Contingency measures shall be implement specified success for oak or bay reestablishment period. Any replanted trees shall be monitored from the time of replanting. 	ent during	g a five-yea	r monitorin	g	
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X	
Explanation: The proposed project would not conflict with any adopted Conservation Plan, Natural Community Conservation Plan or other approved conservation plan. No approved conservation plans have been adopted for the lands encompassing the site or surrounding ands, and no adverse effects are anticipated. There would be <i>no impact</i> on conservation plans.					
V. CULTURAL RESOURCES — Would the project:					
Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		X			

Explanation:

Introduction

An analysis of potential impacts of the proposed project on cultural resources was conducted by an independent consultant, ¹³ and the results are presented below.

Historical Overview

The earliest sustained settlement of the region by Euroamericans began in 1823, with the establishment of the Mission San Francisco Solano, Sonoma. After secularization of the missions, several Mexican landgrants were applied for and approved. In 1841 Rancho Tulucay, a few miles west of the current project area, was granted to Cayetano Juárez. Juárez had settled the land several years before, and, once having legally obtained the grant, brought his family from Sonoma and expanded his adobe, which still stands in downtown Napa.¹⁴ The town of Napa appears to have been named after the Native American group that had occupied the area; the town had been plotted out by Nathan Coombs, an easterner who purchased the land from Valleio in 1843. Napa was an early commercial center and also served as the county seat; the first county courthouse was constructed in 1856, and several public and commercial office buildings built in the late 1800s have continued to be refurbished and preserved to this day. 16 The wine industry, for which the region is famous, began in the earliest days of Spanish and early American settlement of the area. Large vineyards planted by Sam Brannan began in 1859; Charles Krug and Hanns Kornell planted vineyards and began wineries in the 1860s. 17 Several other well-known wineries—including Niebaum, Beaulieu, and Beringer—followed, and vineyards, wine production, and the subsequent tourist market form the basis of the current economy.¹⁸

The 1863 Government Land Office plat for Township 3 North, Range 5 West, depicts a cabin on the north side of Marie Creek, and a fence, "Weddles fence," on the north-facing slope south of Marie Creek. Both the cabin and the fence appear to have been in or immediately adjacent to

¹³ Anthropological Studies Center, Sonoma State University, Tuteur Property Cultural Resources Study, QA166 56/03, January 2004.

¹⁴ Hoover, M.B., H.E. Rensch, E.G. Rensch, and W.N. Abeloe, Historic Spots in California. Fourth edition, revised by Douglas E. Kyle. Stanford University Press, Stanford, California, 1990.

¹⁵ Gudde, Erwin G., *California Place Names: The Origin and Etymology of Current Geographical Names*. Fourth edition, revised and enlarged by William Bright. University of California Press, Berkeley and Los Angeles, 1998.

¹⁶ Hoover, M.B. et al. op. cit.

¹⁷ Hoover, M.B. et al. op. cit.

¹⁸ Hoover, M.B. et al, op. cit.

the current study area. A subsequent historic-period map depicts the study area as part the estates of Robert Sheehy, J.J. Swift, and M. Brenner in 1895.¹⁹

Records and Literature Search and Agency Contact

Prior to the field study, a records search was conducted at the Northwest Information Center (NWIC) of the California Historical Resources Information System, which is housed at Sonoma State University. The NWIC, an affiliate of the State of California Office of Historic Preservation, is the official state repository of archaeological and historical records and reports for a 16-county area that includes Napa County. Additional research was conducted using the files and literature of the Anthropological Studies Center (ASC).

The records search and literature review for this study was done (1) to determine whether known cultural resources had been recorded within or adjacent to the study area; (2) to determine whether known resources have been reported in archaeological, ethnographic, and historical documents and literature; and (3) to assess the likelihood of unrecorded cultural resources based on the distribution of nearby archaeological sites in relation to their environmental setting.

Included in the review were the *California Inventory of Historical Resources*²⁰, *Five Views: An Ethnic Historic Site Survey for California*²¹, *California Historical Landmarks*²², *California Points of Historical Interest*²³, and the *Historic Properties Directory Listing*. The *Historic Properties Directory* includes the National Register of Historical Resources, and the most recent listings (through 10 October 2003) of the California Historical Landmarks and California Points of Historical Interest.

The study area has been the subject of two previous studies. The first was conducted by Jeff Rosenthal of the ASC in 1993. He conducted a mixed-strategy field reconnaissance of the Tuteur and Green Valley Ranches as part of a California Forest Stewardship Plan being prepared for the ranches by the Napa County Resource Conservation District.²⁴ Approximately 50 percent of the current study area was surveyed as part of the project, resulting in the identification of several cultural resources, including CA-NAP-853, a prehistoric bedrock milling-station and lithic-scatter site that is within the current study area, and CA-NAP-856H, a pair of

¹⁹ Buckman, O., *Official Map of the County of Napa, California*, Prunnett Brothers, San Francisco, 1895.

²⁰ California Department of Parks and Recreation, *California Inventory of Historic Resources*, Sacramento, 1976.

²¹ California Office of Historic Preservation, *Five Views: An Ethnic Historic Site Survey for California*, Sacramento, 1988.

²² California Department of Parks and Recreation, California Historical Landmarks, 1990.

²³ California Department of Parks and Recreation, *California Points of Historical Interest*, Sacramento, 1992.

²⁴ Rosenthal, Jeff, *An Archaeological Study of the Green Valley and Tuteur Ranches, Green Valley Road, Napa County, California.* Anthropological Studies Center, Sonoma State University, Rohnert Park, California. Prepared for Dennis Bowker, Napa County Resource Conservation District, 1993.

stone structural foundations and 17 discontinuous wall segments, one of the latter within the current study area. Two obsidian biface fragments were collected from CA-NAP-853 for obsidian-hydration analysis. While he did not formally evaluate the importance of the sites, Rosenthal²⁵ stated that they appeared potentially significant.

A recent study of the rock walls of CA-NAP-856H was undertaken by Kim Tremaine and John Lopez in their *Rock Fences of Napa County: A Pilot Study*. ²⁶ The study was commissioned by the County of Napa in response to public concerns regarding the ongoing damage and destruction of rock fences from continued population growth and urban development. The authors conducted archival research, interviews, and windshield field survey to build a local historical context that could be used for evaluation and preservation of the fences. While Tremaine and Lopez did not formally evaluate the fences of CA-NAP-856H, they suggest that at least portions of the fence may be related to the property boundaries of an individual named Spencer, whose house and fence are depicted on the 1863 GLO plat of the area. Parallel wall segments along some sections of CA-NAP-856H suggest that the fences may also be related to road construction in the late 1860s. Subsequent subdivision of the property by the 1890s may have resulted in the fence construction; Tremaine and Lopez recommend further research, including the examination of deed books and road-district records, to further pinpoint the origin of the fence.

It has been over a decade since the Rosenthal field study, which was conducted in June of 1993. Considering that the current field study was conducted in December, it was expected that additional resources might have been exposed by rodent activity or erosion, and due to the reduced vegetation of late fall. It was also considered possible that outlying historic-period domestic deposits related to homesteads, such as the cabin identified on the 1863 GLO, and/or ranching activity might be present in the unsurveyed portion of the study area.

Field Methods

Michael Newland, Staff Archaeologist, and Ruth Rhoades, Archaeological Technician, of the ASC conducted a pedestrian survey of the project area on 3 December 2003. John Aranson, Trail Steward and co-designer of the proposed trail alignment, accompanied the survey team and guided them through the entirety of the trail corridor. Cut banks along seasonal drainages were examined for soil profiles that might reveal archaeological deposits and rock outcrops were examined for any cultural modification, such as rock art or bedrock mortars. Surface visibility varied between little or no visible ground surface, due to dense grasses, to complete surface visibility in areas of bare soil, particularly in places along the creek bed, where seasonal grasses had died off and left the surface partially clear. Upland areas were covered with dense chaparral and nettles, and the ground surface was only visible in areas of rodent disturbance. In total, approximately 40 percent of the project area ground surface was exposed; the remaining 60 percent was observable sporadically throughout. The ground surface was examined for archaeological remains, while rodent burrow backdirt piles and road cuts were examined for buried archaeological deposits.

²⁶ Tremaine, Kim J., and John A. Lopez, *Rock Fences of Napa County: A Pilot Stud,*. Tremaine & Associates, Dixon, California. Prepared for Napa County Conservation, Development, & Planning Department, Napa, California, 1998.

²⁵ Rosenthal, op. cit.

Findings

No unrecorded cultural resources were identified within the trail corridor. Two previously identified cultural resources, CA-NAP-853, a prehistoric bedrock milling station and lithic scatter (discussed in Item V.b, below), and CA-NAP-586H, a historic-period site consisting of two rock foundation features and 17 discontinuous rock-fence alignments, were identified within or adjacent to the corridor (Map 2).

CA-NAP-586H Historic-period stone fence

CA-NAP-586H was originally recorded as two rock foundations and 17 discontinuous rock fence alignments scattered throughout the Tuteur and Green Valley ranches.²⁷ One of these rock fence features is within the current trail corridor.

This feature consists of a 3- to-4-coursed rock fence, approximately 2-1/2 feet tall and 380 feet long. The fence is on the border of a stream terrace overlooking Marie Creek and an unnamed intermittent tributary. The fence line has collapsed in some locations but appears fairly intact in others.

The analysis conducted by Tremaine and Lopez of CA-NAP-586H, while covering several fence segments along Green Valley Road, does not include the segment within the current study area. Tremaine and Lopez suggest that the fence segments they observed were property boundaries or alignments bordering roads, and that further archival research may resolve uncertainties regarding the fence origins.

The fence recorded during the current study may serve a different, or perhaps additional, purpose than property-boundary definition. Several features were noted outside of the trail corridor, including two depressions; a well-built, unmortared stone-bridge abutment; and an additional rock fence immediately adjacent to Marie Creek on the southern portion of the stream terrace. The 1863 Government Land Office plat for the area depicts a cabin in the general vicinity of the flat; it is possible that the fences, bridge, and depressions are related to this early residence. The fences do not appear to continue off of the flat, suggesting that they are not primarily for delineating the property boundary, but rather served as a corral or animal enclosure to keep domesticated animals out of the creeks and on the terrace, next to possible farm structures. While formally recording the outlying features was outside of the scope of work for the current project, it is suggested here that the rock fence within the trail corridor may be more properly associated with the adjacent features than with the other walls recorded as part of CA-NAP-586H. As Tremaine and Lopez recommended, further archival research, and, for this site, a full recording of nearby features, may further determine the associations and purpose of the fence. Further archival research might also warrant the designation of a new site trinomial, as the fence may be unrelated with the rest of the resources recorded as CA-NAP-586H.

Conclusions

<u>CA-NAP-586H Historic-period rock fence.</u> Rosenthal suggests that CA-NAP-586H may be "potentially significant". The Anthropological Studies Center study agrees that at least this

²⁷ Dworkin, W., J. Rosenthal, L. Compas, and S. Searle, *Archaeological Site Record for CA-NAP-586H*. On file, Northwest Information Center, Sonoma State University, Rohnert Park, California, 1993.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
resident history Anthrope California with and Crite under	ure of the site may be important. Based on the podence, the importance Napa County has placed or prical setting of the area, and the fence's pristine shropological Studies Center that this portion of CA fornia Register for Historical Resources under two events that have made a significant contribution to cultural heritage, specifically the early Euroamerication 4, as a contributing element to a site that materstanding of California's history; further research ne California Register.	n rock fence setting, it is t -NAP-586H o criteria: Cri to the broad can settleme y yield infor	es as contribine opinion of may be eligon terion 1, for patterns of tent of Napa (mation impo	uting to the if the ible for the its associa California's County, and rtant to the	tion history d under
to be end cons hikir	le the trail corridor overlaps a portion of CA-NAP-se modified or moved during trail construction or us of the fence. No modification to the fence is properties of minor vegetation clearing and soil compacing, bicycling, and equestrian. Therefore, it is concine proposed trail on CA-NAP-586H would be <i>less</i>	se. The trail osed, and the tion. Use of cluded that the	passes acro ne nature of the trail wo ne impact of	oss the sou the project uld be prim	thern arily
<u>Subsurface Historic Resources.</u> There is a high possibility that subsurface historic deposits may exist within the corridor, as archaeological sites may be buried with no surface manifestation. This would be a <i>potentially significant</i> impact, which would be reduced to a <i>less-than-significant</i> level with implementation of the following mitigation measure.					
	Mitigation Measure 5: If concentrations of prare encountered during ground-disturbing work be halted until the services of a qualified archaevaluate the resource(s) and, if necessary, redocument and prevent any significant adverse sponsor shall fund and implement the mitigation (f) of the CEQA Guidelines and Public Resour materials might include obsidian and chert flak knives, scrapers) or toolmaking debris; cultural heat-affected rocks, artifacts, and dietary bone equipment (e.g., mortars, pestles, handstones concrete, or adobe footings, corrals and walls; metal, glass, and/or ceramic refuse.	k, all work in a cologist can commend more on in accordances Code Scaed-stone to ally darkened or shellfish.	n the immeding the retained in the resource ance with Selection 21083 ols (e.g., productions; aremains; arematerials materials meterials and the remains; and the remains are remains and the remains and the remains and the remains are remains are remains and the remains are remains are remains are remains are remains and the remains are remains are remains are remains and the remains are remains are remains are remains and the remains are remains are remains are remains and the remains are remains and remains are remain	iate vicinity of to identify asures to (s). The pr ection 1506 3.2. Prehis bjectile poin en") contair of stone mi	shall rand roject 64.5(c)— toric ots, ning illing e stone,
b)	Cause a substantial adverse change in the significance of an archaeological resource pursua to §15064.5?	nt	X		
28 R	osenthal, op. cit.				

Initial Study: Napa-Solano Ridge Trail Project

Explanation:

Introduction

The cultural resources analysis discussed in Item V.a, above, included an investigation of archaeological resources, the results of which are presented below.

Archaeological and Ethnographic Overview

An analytic framework for the interpretation of Napa County prehistory is provided by Fredrickson²⁹, who divided human history in California into three broad periods: the Paleoindian period, the Archaic period, and the Emergent period. This scheme used sociopolitical complexity, trade networks, population, and the introduction and variations of artifact types to differentiate between cultural units. With minor revisions, the structure remains the dominant framework for prehistoric archaeological research in this region.

The Paleoindian period (10,000-6000 B.C.) was characterized by small, highly mobile groups occupying broad geographic areas. During the Archaic period, consisting of the Lower Archaic period (6000-3000 B.C.), Middle Archaic period (3000-500 B.C.), and Upper Archaic period (500 B.C.-A.D. 1000), geographic mobility may have continued, although groups began to establish longer-term base camps in localities from which a more diverse range of resources could be exploited. The addition of milling tools, obsidian and chert concave-base points, and the occurrence of sites in a wider range of environments suggest that the economic base was more diverse. By the Upper Archaic, mobility was being replaced by a more sedentary adaptation in the development of numerous small villages, and the beginnings of a more complex society and economy began to emerge. During the Emergent period (A.D. 1000 to historic contact), social complexity developed toward the ethnographic pattern of large, central villages where political leaders resided, with associated hamlets and specialized activity sites. Artifacts associated with the period include the bow and arrow, small corner-notched points, mortars and pestles, and a diversity of beads and ornaments.³⁰

Ethnographic literature indicates that at the time of historic contact, the project area was near the border of the territory of the Wappo-speaking people, specifically the Southern Wappo, and the Patwin, a Wintun-speaking people.³¹ The territory of the Southern Wappo extended roughly from just north of the city of Napa northward to the city of St. Helena, encompassing the lower half of the Napa Valley and the fringing foothills and low mountains to the east and west. The Wappo economy was based on fishing, hunting, and gathering, with village community, or

²⁹ Fredrickson, David, Cultural Diversity in Early Central California: A View from the North Coast Ranges. *Journal of California Anthropology* 1(1):41-53, 1974.

³⁰ Gerike, Christian, Seana L.S. Gause, Suzanne Stewart, and Katherine Johnson, *Cultural Resources Study for Santa Rosa Subregional Long-term Wastewater Project*. Anthropological Studies Center, Sonoma State University Academic Foundation, Inc., Rohnert Park, California. Submitted to Harland Bartholomew and Associates, Inc., Sacramento, 1996.

³¹ Sawyer, Jesse, Wappo. In *California*, edited by Robert F. Heizer, pp. 256-263. Handbook of North American Indians, vol. 8, William C. Sturtevart, general editor. Smithsonian Institution, Washington, D.C., 1978.

tribelet, members moving to various places within their territory to take full advantage of different resources as they became available. A typical Wappo tribelet inhabited a semi-permanent village, from which people made trips to temporary seasonal camps. Some Wappo tribelets defended their territory against trespassers, but land was not considered privately owned. The closest documented ethnographic village to the study area was ka'imus, an old village site described as being located at Yountville. The Wappo culture was significantly disrupted through missionization and Euroamerican settlement.

The territory of the Patwin extends from the current location of the Sacramento River levee town of Princeton in the Central Valley, south to Suisun Bay, west to Chiles and Long valleys, and east to the towns of Yolo, Colusa, and the Montezuma Hills. The Patwin appeared to have friendly relations with both the Wappo to the southwest and to the Southern Pomo to the west, and appear to have had a more stratified social structure, greater concern over territory and possessions, and more craft specialization than the Wappo. As with the Wappo, however, they subsisted on a fishing, hunting, and gathering economy, and were likewise impacted by missionization and Euroamerican settlement.

Records and Literature Search, Agency Contacts, and Field Methods

A records and literature search, and a field survey, for archaeological resources were performed as discussed in Item V.a, Records and Literature Search and Agency Contact, above. In addition, the State of California Native American Heritage Commission (NAHC) was asked to review the Sacred Lands file for information on Native American concerns in the study area. No response had been received at the time the cultural resources analysis was prepared.³²

Findings

<u>CA-NAP-853</u>: Prehistoric bedrock milling station and lithic scatter. CA-NAP-853 was originally recorded as a prehistoric bedrock mortar with 24 mortar cups, overlooking a spring, a stream terrace, and Marie Creek. ³³ Two obsidian biface fragments were identified on the stream terrace and collected for obsidian-hydration analysis. Dworkin et al. hypothesized that more mortar cups might be found on other buried portions of the outcrop, only a fraction of which was exposed at the time of initial recording. ³⁴ A 10-meter buffer was included into the northern site boundary to account for additional, potentially buried, mortars.

Dworkin et al.'s hypothesis has been confirmed by the ASC study. Over a dozen new mortar cups were identified in 2003 in addition to those first recorded; other cups, which had been exposed in 1993, have since been covered by colluvium and vegetation.

In addition, the two obsidian artifact fragments were retrieved from the ASC Collections Facility and reviewed in preparation for this study. Only one of the artifacts (Accession # 93-1-15A)

³² Anthropological Studies Center, Sonoma State University, Tuteur Property Cultural Resources Study, QA166 56/03, January 2004.

³³ Dworkin, W., J. Rosenthal, L. Compas, and S. Searle, *Archaeological Site Record for CA-NAP-853*. On file, Northwest Information Center, Sonoma State University, Rohnert Park, California, 1993.

³⁴ Dworkin, op. cit.

appears to be a biface fragment; the other (Accession # 93-1-15A) is an obsidian flake rather than a biface fragment. Several naturally occurring, <1 cm, opaque greenish gray obsidian pebbles were noted at the south end of the stream terrace, below the bedrock mortar outcrop. Neither the biface nor the flake, both of which are black and glassy and may be Napa obsidian, appeared to be from the same obsidian source.

The Marie Creek cutbank was inspected for evidence of buried cultural resources, or buried stable land surfaces that might contain such deposits. No evidence of buried resources or stable surfaces was identified. However, as colluvium has eroded onto the milling station within the past 10 years, it seems highly probable that additional, unidentified mortar cups may be buried, as well as cultural materials on the stream terrace below it.

Conclusions

CA-NAP-853: Prehistoric bedrock mortar and lithic scatter. Rosenthal suggests that CA-NAP-853 may be "potentially significant". The Anthropological Studies Center study agrees with this assessment. The site's location next to a year-round spring and the intermittent Marie Creek would make it a suitable location for resource procurement, and the size, number, and potential for additional, buried mortar cups and other archaeological features and materials would suggest that there is the potential for recovering important information regarding prehistoric subsistence and settlement. While the bedrock mortar has been impacted by the placement of a utility pole in the center of the outcrop, it appears otherwise to have been impacted little by cattle grazing, and appears to have excellent integrity of setting and location. CA-NAP-853 appears to be eligible for the California Register of Historical Resources under Criterion 4 for its ability to yield information important to the understanding of local prehistory.

While the proposed trail corridor does overlap the site boundary of CA-NAP-853 as proposed by Dworkin et al.³⁶, the trail itself is well outside of the site boundary. The site boundary as previously designated includes a built-in buffer. The trail would be created by minor vegetation clearing and soil compaction within a four-foot-wide trail corridor, and is expected to be used primarily by hikers, bicyclists, and equestrians. Construction of the proposed trail would be a *potentially significant* impact, which would be reduced to a *less-than-significant* level with implementation of the following mitigation measure.

Mitigation Measure 6: Use of the area near CA-NAP-853 shall be monitored by trail personnel to prevent disturbance of the site and to quickly identify disturbance and take immediate measures to protect the site should disturbance occur. These measures shall include further study to more accurately determine the boundaries and nature of these cultural resources and to evaluate them in accordance with the criteria of the California Environmental Quality Act Guidelines and the California Register of Historical Resources.

Subsurface Archaeological Resources

As discussed in Item V.a, Conclusions, Subsurface Historic Resources, above, there is a high possibility that subsurface archaeological deposits may exist within the corridor, as

³⁵ Rosenthal, op. cit.

³⁶ Dworkin, op. cit.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
sig	naeological sites may be buried with no surface man nificant impact, which would be reduced to a less-to lementation of the following mitigation measure.				
	Mitigation Measure 7: Implement Mitigation Mea	asure 5.			
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
	<u>planation</u> : There are no known paleontological resou , and the project would have <i>no impact</i> .	irces or un	ique geolog	ic features	on the
d)	Disturb any human remains, including those interreduction outside of formal cemeteries?	d	X		
hun Cal grav Cor con Cor ider	planation: The evidence of historic and prehistoric action and remains could be encountered during project conforming Health and Safety Code states that it is a missive. If human graves are encountered, work should honer should be notified immediately. At the same the tacted to evaluate the situation. If human remains a coner must notify the Native American Heritage Compatification. This is a potentially significant impact, inificant level with implementation of the following manufacture.	nstruction. demeanor nalt in the v me, an arc ire of Nativ mission wi which wou	Section 70 to knowingly icinity and the haeologist see American thin 24 hours ld be reduced.	50.5 of the y disturb a he County hould be origin, the s of this	e human
	Mitigation Measure 8: In the event that any husite disturbance, all ground—disturbing work shat coroner shall be notified immediately. If the coronative American, the Native American Heritage 24 hours. A qualified archaeologist, in consultate Commission, shall recommend subsequent measures.	ll cease im oner deterr Commissi ion with th	mediately a mines the re on shall be o e Native Am	nd the Cou mains to b contacted v nerican Hei	inty e vithin ritage
VI.	GEOLOGY AND SOILS — Would the project:				
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
east of the	tion: The nearest known active fault is the Green he project site. The impact on the proposed puld be <i>less than significant</i> .				
ii)	Strong seismic ground shaking?			X	
of the Grevent of	tion: As discussed in Item VI.a.i, above, the pro- reen Valley Fault, and the project site could be s an earthquake. However, the project site is not rea as identified in the Napa County General Pla	subject to s within a S	strong grour	nd shaking	in the
bridges, The add additiona	posed project would not involve structures other 26 to 30 feet in length, and designed to support itional risk generated by exposure of these structures at risk of injury due to exposure of people to grow two bridges, would be <i>less than significant</i> .	: 85 pound ctures to g	s per squar round shaki	e foot live I ng, and the	oad. e
iii)	Seismic-related ground failure, including liquefaction?			X	
strength "suscept	tion: Liquefaction is a process by which water-sa and fail during strong seismic groundshaking. I sibility," of soils and sediments to liquefaction is cand nearly level alluvial landforms than in steep	In general, considered	the relative to be higher	hazard, or er on gently	r y
³⁷ Napa C through <i>A</i>	County Board of Supervisors, Napa County General I April 22, 1992, Figure 85, page 9-5.	Plan, adopt	ed June 7, 19	983, as ame	ended
38 Napa C through A	County Board of Supervisors, Napa County General I April 22, 1992, Figure 100, page 9-35.	Plan, adopt	ed June 7, 19	983, as ame	ended

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	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
not rated as being subject to liquefaction or severe set than significant.	tlement, ³⁹ a	nd this impa	ict would be	e less
iv) Landslides?			X	
Explanation: The project site includes hilly terrain with occurred on the site in the past. In the Napa County G Moderate Slide Occurrence. 40				
As discussed in 8. Description of Project, Operation ar Design, above, the proposed trail width is four feet. Treslope to allow for water drainage. The trail grade would average grade of the entire trail expected to be less the proposed with a six-foot wide inside radius. Slope cuts cracking and erosion from uphill surface water. 'Water off the trail at appropriate locations. These project desprevent buildup of water-saturated soil in sloped areas	ail treads with the detection of the between and 10 perces would be some pings, are posign features	ould be at 1 en 7-15 perc ent. Switchb sloped back proposed to s would facil	-3 percent cent, with the acks are to prevent take surfact itate drains	out he ce water age and
During operation, the BARTC Trail Steward, in conjunct temporary closure to public use due to weather, adverse conditions.		•		•
Due to these design features and operational procedure necessary to build the proposed trail, the project would risk of landslides, nor would use of the trail expose used due to landslide. The effect of landslides would be a landslides would be a landslides.	I not contrib ers to a sign	ute significa ificant addit	intly to the ional risk o	
b) Result in substantial soil erosion or the loss of topsoil?			X	
Explanation:				
Erosion and loss of topsoil could occur at the site during trail. As discussed in Item VI.a.iv, above, the proposed				
39 Napa County Board of Supervisors, Napa County Genera	l Plan, adopt	ed June 7, 19	983, as ame	ended

 $^{^{40}}$ Napa County Board of Supervisors, Napa County General Plan, adopted June 7, 1983, as amended through April 22, 1992, Figure 91, page 9-19.

approximately 3 to 4 feet wide with a 1-3 percent out slope (in same direction as the terrain they cross) to avoid interrupting natural drainage patterns. The trail would have an average grade of less than 10 percent, a maximum grade of 15 percent, and switch backs with a six-foot inside radius. Slope cuts would be sloped back to prevent cracking, or erosion from uphill surface water. Down-slope fills would be raked out to allow accelerated native re-vegetation growth. 'Water Dips' (gently rolling depressions in the trail profile) would take surface water off the trail at locations consistent with natural drainage patterns. Rock crossings or culverts with energy dissipaters would be installed at locations with significant seasonal drainage. Because of these trail construction methods, and because the trail would be limited to approximately four feet wide, leaving no large unvegetated areas that would be susceptible to substantial erosion, the trail would not result in significant erosion or loss of topsoil.

Construction would occur during the late spring or early fall, when soil moisture content is ideal to avoid the generation of either mud or dust, and during which time the potential for erosion from unfinished surfaces would be low. After a period of natural curing and use by hikers only, the trail tread would consolidate and have a lower erosion potential than a newly constructed surface.

The Operation and Management Plan includes the following erosion control measures⁴¹:

- NRCS shall design techniques to protect the Napa-Solano Ridge Trail and the Marie Creek watershed from cattle grazing
- BARTC and landowner shall comply with NRCS's recommended restorative and protection measures
- The following measures will be designed by NRCS and landowner and employed by BARTC and landowner to protect the trail from cattle grazing:
- Landowner will exclude all cattle grazing from the project area shown on Figure 2 until the spring of 2006
- BARTC, NRCS, and landowner acknowledge that approximately 1,900 feet of either barbed wire or solar powered electric fencing will be needed along the north boundary line to exclude cattle from the trail corridor, to be constructed by BARTC
- This temporary exclusion will improve the quality of forage in this area and protect the tread of the trail during its critical curing time
- The following measures will be implemented by BARTC and the trail contractor to protect the trail from erosion and mud flows:
 - Drift fencing will be installed on the downhill side of trail to catch loose debris. The fence will remain in place until the ground is stabilized
 - Trail crew will rake down and spread the overburden (the fill that is created by the trail machine). This method prevents slipping and cracking during the rainy season and allows for accelerated native plant growth
- Maintenance of the fence line is the responsibility of the landowner. In the event that
 cattle get into the trail corridors during the exclusion period, it is the responsibility of the
 landowner to remove the cattle and to repair any damage to the fencing and trail which
 they might have caused

Future extensions of the trail (the five potential future corridors) would be built to the same standards as the loop trail.

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⁴¹ Bay Area Ridge Trail Council, Tuteur Ranch Operation and Management Plan, Draft, undated, page 8.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
The Operation and Management Plan calls for a post-conducted by BARTC, the landowner, LTNC, funders, LTNC to verify that all measures listed in the Operation implemented. Trail construction would be considered when BARTC and the trail contractor check, repair, or drainage structures, retaining walls, and other trail faciduring winter storms.	and NRCS and Mana completed a reconstruct	to allow the gement Pla after the first any portion	landowne n have bee t rainy sea s of the tra	r and en son ail tread,	
The project will also be required to comply with the rec Plan to be prepared by the applicants and reviewed by Development and Planning Department. The project a grading regulations of the Napa County zoning ordinar	the Napa (County Cons	servation,		
Typical annual trail maintenance, as specified in the Operation and Management Plan, would include brushing the trail corridor each fall to reduce chaparral and poison oak growth into the trail travelway. The trail tread and drainage structures typically would be maintained each fall to prepare the trail for the winter. After the winter storms, the trail typically would be checked to make any repairs needed. BARTC proposes to assume maintenance duties when trail construction is complete, including repair of tread and repair of any trail hazards. Skyline Wilderness Park Association may take on the aforementioned duties in the future, with training and assistance from the BARTC Trail Steward.					
As a result of the trail's design features, erosion controby construction (slightly less than one acre, as discuss maintenance procedures, construction- and operation-significant impact.	ed in Item '	VIII.a, below), and trail	•	
or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	le,		X		
Explanation: See Items VI.a.i, VI.a.ii, VI.a.iii, and VI.a.	iv, above.				
d) Be located on expansive soil, as defined in Table 1 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X		
Napa County Zoning Ordinance, Title, 18, Chapter 18.108	3 Conservation	on Regulatior	ns.		

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
<u>Exp</u>	lanation: See Items VI.a.ii and VI.a.iii, above.					
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposa systems where sewers are not available for the disposal of wastewater?	ıl			X	
	lanation: The proposed project would not involve an tewater disposal systems, and would have no impa te		tic tanks or	alternative		
VII.	HAZARDS AND HAZARDOUS MATERIALS — ${\it W}$	ould the p	roject:			
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X		
	lanation: The operation and use of the proposed tra isposal of hazardous materials, and this impact would			•	use,	
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X		
invo	lanation: As discussed in Item VII.a, above, operation live use of hazardous materials, and there is no sign ditions releasing hazardous materials into the environ	ificant risk	of upset or	accident		
duri	Small amounts of hazardous materials (oil, gasoline, etc.) may be temporarily located onsite during construction activities. Most of the materials are consumed through use, resulting in relatively little waste. The Operation and Management Plan ⁴³ states:					
⁴³ Bay Area Ridge Trail Council, Tuteur Ranch Operation and Management Plan, Draft, undated, Section VII. Trail Construction, E. Trail Equipment and Tools, page 7.						

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	The trail contractor will bring only the necessary as operate the machinery on site. No flammable protection trail contractor will report immediately any spill of a BARTC and the contractor are solely responsible compliance with all applicable local state and federal	ducts will b contaminar for any cle	e stored or ots to lando	left on site wner and L	. The .TNC.
	these reasons, hazardous materials use by the projne public or the environment. This impact would be				hazard
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
	olanation: There are no existing or proposed schools . The project would have <i>no impact</i> .	s within one	e-quarter m	ile of the pr	roject
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
	olanation: The project site is not listed by the state Da hazardous materials site. The project would have	•		ıbstances (Control
e)	For a project within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
Nap	<u>planation</u> : There are no public or public use airports be County Airport is approximately four miles from the impact .				•
f)	For a project within the vicinity of a private airstrip would the project result in a safety hazard for peopl residing or working in the project area?				X

		Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact		
	lanation: There are no private airstrips in the vicinity ald have <i>no impact</i> .	of the pro	oject site, an	d the proje	ect		
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X			
Explanation: The proposed trail project would not interfere with or change existing emergency response and evacuation plans. This would be a <i>less than significant</i> impact.							
h)	Expose people or structures to significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X			

Less Than

<u>Explanation</u>: Trail construction could increase risk of wildland fire. As described in the Operation and Management Plan,⁴⁴ BARTC would ensure the trail contractor develops a Fire Safety Plan and obtains approval from the landowner prior to beginning construction. The Fire Safety Plan would address:

- Procedures for reporting a fire;
- Personnel and fire safety equipment the contractor will have on site, e.g. Nomex, fire tents, etc.;
- Procedures to be taken on 'red flag days' (days of extreme fire danger). On red flag days, trail construction would not commence;
- Procedures to ensure that all power equipment is fire safe; and
- Training to be given contractor's employees regarding fire safety.

Implementation of these procedures would reduce the risk of construction-related fire to a *less than significant* level.

During operation and use of the trail, public access to grassland, chaparral and oak woodland areas could increase fire hazards. The Operation and Management Plan provides that the trail may be temporarily closed for safety reasons, such as during times of high fire hazard, and the Skyline Trail use regulations, which include prohibitions on smoking, firearms, and open fires except in designated areas, would also apply to the Napa-Solano Ridge Trail. Public use of trails at the adjacent Skyline Wilderness Park has not resulted in a significant increase in

⁴⁴ Bay Area Ridge Trail Council, Tuteur Ranch Operation and Management Plan, Draft, undated, Section VII. Trail Construction, F. Fire Safety Plan, page 7.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
sigr pote	land fire hazard, and it is anticipated that use of the nificantly increase fire hazard. Furthermore, increase that illegitimate activities that could create greater drinking/partying.	ed legitima	ite public ac	cess may c	
•	lementation of the above procedures would reduce n significant level.	the risk of	operation-re	elated fire to	a less
VIII.	HYDROLOGY AND WATER QUALITY — Would	d the projec	et:		
a)	Violate any water quality standards or waste discharge requirements?			X	
soil in ir lubr	lanation: Clearing of existing vegetation, exposure during construction of the proposed trail would increased sedimentation and turbidity in Marie Creek icants, and other toxic materials used during constructions also could enter and contaminate surface were	ease erosic and down uction, if sp	on potential, stream surfa	which coul ace waters.	ld result
trail trail	proposed trail would disturb less than one acre in tapproximately four feet wide, plus an estimated 18 supslope. The 0.97 miles of trail plus upslope exculd disturb approximately 30,730 square feet, less the	inches to t avation, wi	wo feet of e th a total wid	xcavation in the contract of t	nto the et,
com the Dep	project would be required by Napa County to preparely with the Napa County grading ordinance. The I applicants and reviewed by the Napa County Consepartment, will contain detailed information on the eximple construction period and permanal contents.	Erosion Co ervation, Do sting trees	ntrol Plan, to evelopment and vegeta	o be prepai and Planni tion, topogr	red by ing raphy,
is di be p area con fuel	discussed in Item VI.b, above, construction would orly enough to avoid mud, but wet enough to avoid duphased to start with the upper, dryer sections first, as last. The design of the project includes erosion of trol measures (discussed in Item VI.b, above), which described in Item VII.b, above, would reduce impacinificant level.	ust. If nece nd constru control feato h, along wi	essary, trail of ct lower sectures and couth th the contro	construction tions in wo nstruction e of measure	n would odland erosion s for
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer			X	

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
vol	level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	1			
wou	<u>planation:</u> The proposed unpaved trail would not creally all the proposed unpaved trail would not creally all the proposed unpaved trail would not creally all the proposed unpaved trail would not creatly all the proposed unpaved trails all the proposed unpaved trails all the proposed unpaved trails all the proposed unpaved unpaved trails all the proposed unpaved unpa	construction	on nor opera	ation of the	trail
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- o off-site?	r		X	
<u>Explanation</u> : As discussed in Item VI.b, above, the proposed trail would be designed to avoid any significant alteration of natural drainage patterns, would add no significant impervious surfaces, and would include measures to control potential erosion during construction and at natural drainage crossings of the trail. Due to these measures, the trail would not result in substantial erosion. The impact on erosion would be <i>less than significant</i> .					
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site?			X	
sub	olanation: The proposed unpaved trail, incorporating stantially alter existing drainage patterns (see discussed on the rate and amount of downstream flows wo	ssion in Ite	m VI.b, abo	ve), and the	
e)	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
<u>Exp</u>	planation: See Items VIII.a and VIII.d, above.				

		Potentially Significant Impact	Less I han Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f)	Otherwise substantially degrade water quality?			X	
<u>Exp</u>	olanation: See Items VIII.a, VIII.c, and VIII.d, above.				
g)	Place housing within a 100-year flood hazard area a mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	.S			X
<u>Exp</u>	lanation: The project would not involve any housing	, and woul	d have <i>no i</i>	mpact.	
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
	<u>clanation</u> : The proposed project is not located within all have <i>no impact</i> .	the 100-ye	ear flood zoi	ne. ⁴⁵ The p	oroject
i)	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
Exp proj	<u>clanation:</u> There are no dams, levees, or other source ect site. 46 The project would have <i>no impact</i> .	es of flood	lwaters upst	ream of th	е
j)	Inundation by seiche, tsunami, or mudflow?			X	

⁴⁵ Napa County Board of Supervisors, Napa County General Plan, adopted June 7, 1983, as amended through January 23, 1996, Figure 105, page 10-19.

 $^{^{46}}$ Napa County Board of Supervisors, Napa County General Plan, adopted June 7, 1983, as amended through January 23, 1996, Figure 106, page 10-22.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Explanation: There are no reservoirs upstream of the proseiche ⁴⁷ (a seismically- or atmospherically-induced oscillagulf). The project site is over ten miles from the San Palan earthquake-induced tsunami (seismic sea wave) on the project site includes steep terrain (see Item VI.a.iv, a occurred at the project site in the past, there are no potential could inundate the project site.	ating wav blo Bay sh ne site is t bove) and	e in an inlar loreline, and therefore rei d small lands	nd body of volume the poten mote. Althous have	water or tial for ough
This would be a <i>less than significant</i> impact.				
IX. LAND USE AND PLANNING — Would the project	:			
a) Physically divide an established community?				X
<u>Explanation</u> : The project would be constructed in a rural physically divide any established community in the area.		•		
b) Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purposed of avoiding or mitigating an environmental effect?	,		X	
Explanation: The project site is designated Agriculture, WElement of the Napa County General Plan, and zoned Al Specific Plan applies to the project site. The proposed tr General Plan land use designation and zoning. Impacts than significant.	W (Agricu ail would	Itural Water not conflict	shed). No with the sit	e's
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
Explanation: There are no habitat conservation or natural applicable to the project site, and the project would have			ation plans	3
47 Ibid.				

		Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X.	MINERAL RESOURCES —Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	e			X
	<u>olanation</u> : There are no known mineral resources on ject would have <i>no impact</i> .	or near the	e site ⁴⁸ , and	the propos	sed
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				X
	<u>planation</u> : As discussed in Item X.a, above, there are ject site identified in the Napa County General Plan.				
XI.	NOISE — Would the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local generation or noise ordinance, or applicable standards of other agencies?	al		X	
pro	<u>planation</u> : The proposed trail would be restricted to ne ject-generated noise is anticipated, and project opera nificant .				
Cor	nstruction noise is discussed in Item XI.d, below.				
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	

Less Than

 $^{^{48}}$ Napa County Board of Supervisors, Napa County General Plan, adopted June 7, 1983, as amended through December 3, 1998, Figure 82, page 8-25.

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact		
not gro that	planation: Project operation, which would consist of generate substantial groundborne noise or vibration undborne vibration or noise, but this effect would be to is remote from structures or substantial numbers of a significant.	. Project of temporary	construction and would	may gener occur in an	ate area		
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X			
Exp	olanation: See Item XI.a, above.						
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X			
	Explanation: Trail construction activities would generate noise through use of mechanized equipment, which is anticipated to include:						
	 A small excavator, powered by a diesel motor A 'SWECO' Trail Machine, powered by a diesel Poinjar rock hammer, powered by a gas mix Honda power carriers, powered by gas Cobra rock drills, powered by a gas mix Trail motorcycles, powered by a gas mix Chain saws, powered by a gas mix 	motor					
con nois Due rece	e of this power equipment would temporarily general struction period. However, the project is located in a se receptors, and the public would be excluded from the to the distance from the project site to the nearest eptors would not be excessive, and construction nois nificant.	a remote a the projec receptors,	rea, with no t site during noise levels	nearby seconstruction at the near	on.		
d)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or				X		

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
woı	king in the project area to excessive noise levels?				
-	<u>planation</u> : The project site is not located within two uld have <i>no impact</i> .	miles of any	/ public airp	orts. The p	oroject
f)	For a project within the vicinity of a private airstrip would the project expose people residing or working in the project area to excessive noise levels?				X
-	<u>planation</u> : There are no private airstrips in the vicinitud have <i>no impact.</i>	ty of the pro	oject site, an	nd the proje	ect
XII.	POPULATION AND HOUSING — Would the pro	oject:			
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
infra	<u>planation</u> : The project would not involve construction astructure that could induce substantial population of the no impact .				
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
-	planation: No housing would be displaced by the propact.	oject. The	project woul	ld have <i>no</i>	
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
Exp	planation: No people would be displaced by the pro	ject. The p	roject would	l have <i>no i</i>	mpact.

XIII	. PUBLIC SERVICES : Would the project result in substantial adverse physical impacts associated with	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
the	provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:	,			
a)	Fire protection?			X	
incr con fire fire	<u>planation</u> : Construction and use of the proposed trail rease the risk of fire at the site. However, as discussed struction Fire Safety Plan and operational procedures to a less than significant level. Therefore, it is not an protection facilities would be required to continue to purchase to the proposed site, and this would be a less th	ed in Item s are antic iticipated t provide ac	VII.h, above ipated to re hat new or perfect to the contraction of the	e, the propeduce the riphysically are protection	osed sk of altered
b)	Police protection?			X	
den	<u>planation</u> : Activities at the proposed trail are not anticenand for police protection at the site, or to require news would be a less than significant impact.				
c)	Schools?				X
	olanation: The project would not generate any studer lities. The project would have <i>no impact</i> .	nts or subs	tantial dem	ands on sc	hool
d)	Parks?			X	
	<u>planation</u> : The proposed trail would be accessed thro lities at Skyline Wilderness Park. While some users				

		Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	erness Park visitors who would have come to the P the proposed additional trail facilities could increas				
sma	rever, the anticipated number of new users of Skylin II, and would not exceed the capacity of the existing new park facilities would be required, and this would	g parking fa	cilities and	trails at the	Park.
e)	Other public facilities?			X	
	anation: No other public facilities would be substan	ntially affec	ted by the p	roject. Thi	is would
	project's effects on utilities such as water and sewe w, and effects on storm drainage are discussed in l				VI,
XIV.	RECREATION —				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
visite	anation: As discussed in Item XIII.d, above, the property to Skyline Wilderness Park, but this additional usent use, and would not lead to substantial physical dities at Skyline Wilderness Park or elsewhere. This act.	sage would deterioration	d be relative in of the pub	ely small rel olic recreat	lative to ion
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	ıl	X		
envi than Che	anation: The project consists of the construction of ronmental effects of this trail, and mitigation measure significant level, where required, are discussed in locklist. All impacts would be <i>less than significant</i> , inficant level by the mitigation measures identified a	res require tems I thro or would be	d to reduce ugh XVI of	impacts to this Enviro	a less nmental

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Less Than

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV.	TRANSPORTATION/TRAFFIC — Would the proj	ject:			
a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections?			X	
Park dista trail leve effe thai	lanation: The proposed trail is anticipated to attract at the Revision of the Existing extensive and length ance between the existing Skyline Wilderness Park parts, the increase in visitors and additional vehicle trips wells. The additional visitors' vehicle trips would be discusted in the section operations during peak periods, as an significant. For similar reasons, effects on publicated be less than significant.	ny trail sys parking lot would be s tributed the well as ot	tem in the P trailhead ar mall relative roughout the her periods	ark, and the properto existing expenses to existing expenses day, and would be	e osed traffic the less
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated road or highways?	s		X	
	lanation: As discussed in Item XV.a, above, the projervice at any intersections. This would be a less tha			o affect the	e level
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
<u>Ехр</u> <i>imp</i>	lanation: The proposed project would not affect air t act.	raffic patte	erns, and wo	ould have <i>n</i>	10
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
the the	<u>planation</u> : The project would not create any significal project could increase the traffic volumes in the area traffic from the project would result in any unusual in the project vicinity. This would be a less than	a, there is in mpacts to p	no evidence pedestrians,	to sugges	t that
e)	Result in inadequate emergency access?			X	
sub	<u>planation</u> : As discussed in Items XV.a and XV.d about a stantially affect local intersection operations, roadward therefore have a less than significant impact or	ay operatio	ns, or intern		
f)	Result in inadequate parking capacity?			X	
Explanation: The proposed project could generate additional parking demand by trail users who would use Skyline Wilderness Park's parking facilities. However, these potential additional users would be small in number and distributed throughout the day, and are not anticipated to result in inadequate parking capacity at Skyline Wilderness Park. Parking impacts would be less than significant .					
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
	olanation: The proposed project would not conflict walternative transportation.	rith adopted	d plans or po	olicies pert	aining
ΧV	I. UTILITIES AND SERVICE SYSTEMS —				
Wo	uld the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	

		Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	lanation: Construction and use of the proposed trail eeds applicable wastewater treatment requirements. act.				
b)	Require or result in the construction of new water of wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	r		X	
	lanation: The proposed trail would not require any nacity. This would be a less than significant impact		or wastewat	er treatme	nt
c)	Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
exis	lanation: As discussed in Item VIII.d, above, the proting drainage patterns, and would not require any new would be a less than significant impact.				
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
	lanation: The proposed trail would not require additier entitlements would not be needed, and this would				
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
Ехр	lanation: See Items XVI.a and XVI.b, above.				
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	

		Potentially Significant Impact	Less I han Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	<u>planation:</u> The proposed trail would generate a neglinact on landfill capacity would be less than significa		tity of solid v	waste, and	the
g)	Comply with federal, state, and local statutes and regulations related to solid waste?			X	
	<u>planation</u> : The proposed project would comply with a d waste. This would be a less than significant imp		d regulations	s pertaining	g to
XVI	II. MANDATORY FINDINGS OF SIGNIFICANCE -	_			
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
are	olanation: As discussed in Items IV, V, and XIV, the as of biological resources, cultural resources, and re in identified to reduce all these potential impacts to lead to be in the control of the contr	creation.	Mitigation m	easures ha	
b)	Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
<u>Exp</u>	<u>planation</u> : The proposed project would not have any	significant	cumulative	impacts.	
c)	Does the project have environmental effects that wi cause substantial adverse effects on human beings,			X	

either directly or indirectly?

<u>Explanation</u>: The proposed project would not have any environmental effects that would cause substantial adverse effects on human beings.

XVIII. REPORT PREPARATION—

This Initial Study and Mitigated Negative Declaration was prepared by Michael Kent & Associates, with analysis of erosion and drainage issues and general technical assistance by LandPeople, biological resources analysis by TOVA Applied Science and Technology, and cultural resources analysis by the Anthropological Studies Center at Sonoma State University.

XIX. MITIGATION MEASURES—

The following mitigation measures have been identified in this document to reduce potentially significant impacts to less-than-significant levels.

Biological Resources:

Mitigation Measure 1:

A. A pre-construction survey shall be conducted to identify the occurrence of special-status plants within the trail corridor. The survey shall be conducted at the appropriate months to correspond to the known flowering periods of such species (Table 1) or during the spring/early summer when diagnostic vegetative characteristics of special status plants are discernable. The survey shall be conducted using the methods and procedures adopted by the California Native Plant Society. No ground/vegetation disturbing activities shall commence on-site until such survey has been completed and it is determined that a special-status plant does not occur in the trail corridor.

If the Napa false indigo, Contra Costa goldfields, Cobb Mountain Iupine, green monardella, or Victors gooseberry are not found to occur within the trail corridor, trail construction would occur in upland areas before construction of the bridged creek crossings. The bridge crossings of Marie Creek would then be surveyed to determine the presence or absence of riparian or wetland species (i.e., few-flowered navarretia and marsh checkerbloom). If vegetation habitat or suitable substrate for these species is not present at the proposed bridge crossings, wooden stakes shall be installed to define the construction zone of allowable ground disturbance activities. The bridge crossing of Marie Creek would proceed with the implementation of this protective measure.

⁵⁰ CNPS. 2001. Inventory of Rare and Endangered Plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA x +388pp.

- B. If special status-species are found within the trail corridor, the trail shall be realigned to avoid impact to the plant population, if feasible. Prior to the implementation of the proposed project, a qualified botanist shall flag areas supporting the identified special-status species. This flagged area would designate those plant populations to be protected. The proposed trail construction may proceed if such identified plant populations can be avoided.
- C. Where the loss of a population/stand of a special-status plant is unavoidable, a qualified botanist shall make a determination as to whether or not the proposed trail would jeopardize the plant's existence in the region. If it is determined that such would occur, compensatory mitigation shall be implemented as follows:
 - 1. Areas near the proposed trail alignment; either presently supporting or potentially supporting the identified special status plant populations, shall be established at a ratio of 2:1 (area established: area impacted). The location of the mitigation area, including the suitability of lands designated as "no land clearing" on the trail plan, shall be determined in cooperation with and subject to the approval of Napa County and, as appropriate, the CDFG.
 - 2. The information on the plant population, anticipated impact and proposed mitigation shall be provided to the Easement Monitoring Coordinator for the Land Trust of Napa County, which holds a conservation easement on the property
 - 3. The mitigation area shall be enhanced if the habitat already supports a population of the target special status species, or shall be restored if the target species is not present but the habitat is suitable to support such species. In either case, the following measures shall be implemented:
 - a. Seeds of the target special status species shall be collected from the project impact area during the appropriate developmental stage of the plants and broadcast in the mitigation area.
 - b. Some of the seeds shall be appropriately stored/germinated and grown for seed production in a nursery familiar with growing native plants.
 - c. A Rare Plant Mitigation and Monitoring Plan shall be developed to provide for the long-term protection of the target special status species population established in the mitigation area. The Easement Monitoring Coordinator for the Land Trust of Napa County shall approve this Plan after consultation with the CDFG and the local chapter of the CNPS. The plan shall define procedures and provide guaranteed funding for seed collection, transplanting, and monitoring and achieving success criteria. The monitoring shall be continued annually for a minimum of 5 years or until a self-reproducing plant population has been established on the site for a minimum of 3 consecutive years without significant human assistance (i.e., replanting).
 - d. Contingency measures shall be implemented, as required, to satisfy the specific success criteria specified in the Plan.

Mitigation Measure 2:

- A. A qualified biologist shall conduct a pre-construction survey to determine if the nest is occupied. The survey shall occur within 14 days prior to the initiation of trail construction activities during the early part of the breeding season (January through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through September). An active nest would be indicated by one or more of the following:
 - 1. Incubation behavior of adults (e.g., regular periods of "disappearance" into the same location followed by short, secretive flights to forage)
 - 2. Extreme distress and alarm calls when in close vicinity of the nest tree
 - 3. Observation of food being carried on the beak or claws to the nest
- B. If the nest is active, the proposed trail alignment between Waypoints 21 and 27 shall be located at least 100 feet from the live oak tree containing the nest structure and the following measures shall be implemented to protect the nest site:
 - Establishment of a buffer using flagging or staking around the tree in accordance with CDFG recommendations until the young have fledged. The nest tree shall be monitored a minimum of once per week to confirm that the young have fledged and that no new nesting pairs are present before the buffer is removed.
 - 2. If it is not feasible to delay or modify construction activities around the tree, the CDFG shall be contacted to discuss alternative buffer options.

Mitigation Measure 3: All property-line fencing shall be limited to barbed wire or other similar fencing that does not restrict the movement of terrestrial wildlife.

Mitigation Measure 4:

- A. No activities that might cause damage to the root systems by earth-moving equipment shall be allowed.
- B. Temporary flagging or staking shall be placed around those trees that are near the trail but not proposed for limb removal. The temporary flagging or staking shall be installed at a distance equal to one-half of the canopy radius measured outward from the edge of the dripline. No disturbance, including grading, placement of fill material, storage of equipment, etc. shall occur within the designated protective zone for the duration of the project.

Although the project as currently proposed is not anticipated to require tree removal, unexpected obstacles encountered during construction could necessitate removal of a small number of trees. If any tree(s) larger than 6 inches DBH are removed, the following mitigation measures shall apply.

C. Compensatory tree replacement shall be provided for native oak or bay trees greater than 6 inches diameter that are proposed for removal:

- 1. Replacement of native oak or bay trees shall be achieved by planting two fifteengallon trees for each tree removed (2:1 ratio).
- 2. Replacement trees shall be planted between November and January with nursery stock from local sources. The trees shall be irrigated by hand for three years and protected from herbivores to ensure their survival. Seedling tree planting, watering, and seedling protection will be administered by the Easement Monitoring Coordinator for the Land Trust of Napa County.
- 3. Annual monitoring of the planted trees shall be conducted for five years from the time of planting. Monitoring reports shall be submitted annually to the Easement Monitoring Coordinator for the Land Trust of Napa County.
- 4. Contingency measures shall be implemented, if necessary, to achieve the specified success for oak or bay reestablishment during a five-year monitoring period. Any replanted trees shall be monitored for survivorship for at least five years from the time of replanting.

Cultural Resources:

Mitigation Measure 5: If concentrations of prehistoric or other historic-period materials are encountered during ground-disturbing work, all work in the immediate vicinity shall be halted until the services of a qualified archaeologist can be retained to identify and evaluate the resource(s) and, if necessary, recommend mitigation measures to document and prevent any significant adverse effects on the resource(s). The project sponsor shall fund and implement the mitigation in accordance with Section 15064.5(c)—(f) of the CEQA Guidelines and Public Resources Code Section 21083.2. Prehistoric materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, and dietary bone or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones). Historical materials might include stone, concrete, or adobe footings, corrals and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse.

Mitigation Measure 6: Use of the area near CA-NAP-853 shall be monitored by trail personnel to prevent disturbance of the site and to quickly identify disturbance and take immediate measures to protect the site should disturbance occur. These measures shall include further study to more accurately determine the boundaries and nature of these cultural resources and to evaluate them in accordance with the criteria of the California Environmental Quality Act Guidelines and the California Register of Historical Resources.

Mitigation Measure 7: Implement Mitigation Measure 5.

Mitigation Measure 8: In the event that any human remains are encountered during site disturbance, all ground–disturbing work shall cease immediately and the County coroner shall be notified immediately. If the coroner determines the remains to be

Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.